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ABSTRACT

The final report of the Study Committee on Public Higher Education Finance in Georgia is presented. An introductory section reviews factors that influence the need for funding for colleges, including demographic trends, economic trends, broad educational trends, and the situation of the Georgia University System. The Committee's recommendations concern funding of the university system, including who should pay, how much funding is needed, how to calculate funding requirements, and how to create financial incentives to provide a quality university system. Specific recommendations concern: a tuition and fee policy, budget lapse, indirect cost recovery, cost savings opportunities, declining enrollment, adequacy of funding for the university system, and student access to higher education. Proposals are made for an overall funding system, including mathematical formula components, provisions for responding to funding needs outside the formula, and a series of operating procedures. The formula has categories for instruction and research, public service, academic support, student services and institutional support, and plant operation and maintenance. Tables and figures are provided. (SW)

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FORMULA FOR EXCELLENCE:

Financing Georgia's University System in the '80s

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Office of the Governor

Atlanta, Georgia 30334

George Busbee
GOVERNOR

To All Georgians Interested in Higher Education:

With great pride I present to you the final report of the Study Committee on Public Higher Education Finance. The report, appropriately entitled "Formula for Excellence: Financing Georgia's University System in the 80s," is the consummation of many hours of hard work and contains sound recommendations for the funding and administration of higher education in our state.

The committee, created by joint agreement of the Board of Regents, the General Assembly and the Governor, was charged with undertaking a thorough review of the financing of Georgia's public higher education system. The sixteen members of the committee have accomplished this task with dedication and thoughtfulness.

The proposals contained herein will strengthen Georgia's University System so that it may continue to merit the pride of Georgians. I encourage you to read not only the summary but the entire report which I hope will serve as both a source of information and a stimulus to action. My interest in these proposals and in the quality of Georgia's higher education system will not end with my term of office. The challenges to a quality program of higher education are of a continuing nature, and I urge you to work -- as I will continue to do -- toward an ever higher level of excellence.

All those who took part in this effort merit the appreciation and commendation of the citizens of Georgia on a job well done.

Sincerely,

George Busbee

George Busbee

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SUMMARY

After consultation with leaders of the Georgia General Assembly and members of the Board of Regents of the University System of Georgia, Governor George Busbee issued an Executive Order on January 22, 1981, creating the Study Committee on Public Higher Education Finance. Working from a preliminary charge to the Committee by Governor Busbee, the General Assembly and the Board of Regents, the Study Committee determined that its purpose was to make recommendations concerning all aspects of University System funding: (1) who should pay, (2) how much funding is needed, (3) how to calculate funding requirements, and (4) how to create financial incentives to build and maintain a quality University System. This Summary presents the Committee's major recommendations.

Background

For the past twenty years, the major determinant of the level of State financial support for the University system has been a funding formula. The formula has its origin in the 1963 recommendations of the Governor's Commission to Improve Education, a group which is generally credited for many of the recent improvements in Georgia's entire educational system. For the 1983 fiscal year, the funding formula estimated a State general revenue funding requirement of nearly $400 million, or about ten percent (10%) of the overall State budget.

Since the current formula was developed in response to an era of rapid enrollment growth, its appropriateness during a period of stabilized enrollment was questioned. But despite early concerns that major revisions in the funding system were needed, we now believe that an enrollment-based formula remains a valid concept for funding the University System. Our recommendations tend to "fine tune" a funding system that has already proven itself.

At a time when economic pressures on the State treasury are mounting, it is important that the concept advanced by the Sanders' commission two decades ago be reasserted:

> The Governor's Commission to Improve Education has approached education as a long-term investment, not as a one-time purchase. Impulse buying is not appropriate in education because more than dollars are required: education also takes time. States which are reaping an educational harvest today in the form of industrial expansion and social and cultural progress are the states which made the necessary educational investment a number of years ago and which continue to invest in order to secure desirable returns in the future.

Much of Georgia's recent economic progress is a direct result of the vision of the State's leaders in 1963. We believe that a renewal of this commitment will serve Georgia well over the coming decade.

Guiding Principles

To carry out its stated purpose, the Study Committee adopted three guiding principles:

- The quality of the University System should continue to be improved.
- The University System should be managed efficiently.
- The overall funding system should provide various financial incentives for quality improvement and efficient management.

Each of these principles is reviewed below.

Quality Improvement. The Study Committee carried out its work with the assumption that Georgia wants and needs a university system of the highest quality. Strong colleges and universities are one of the more important factors in the State's efforts to maintain its standing as a cultural and economic leader of the South. An analysis of growth in appropriations to the University System over the past twenty years demonstrates that Georgians have been willing to pay to build a

stronger University System. Our recommendations envision the maintenance of recent progress and call for further improvements.

Efficient Management. Our recommendations for continued quality improvements must be implemented in the context of the State's overall economic situation. But if the Regents are to lead efforts aimed at improving the quality of the University System with limited additional resources, they will need increased flexibility to manage more efficiently. Our recommendations address areas where the Regents' flexibility needs to be protected or increased in order to manage more efficiently.

Financial Incentives. The Committee's recommendations go beyond a mere plea for higher quality programs and more efficient management. The principal deficiency of the current funding system is that the only way the University System can receive more dollars is to emphasize quantity. We have attempted to devise a formula and funding system that also will reward attempts to increase quality and increase efficiency.

General Recommendations

Tuition Policy. The Committee was asked to develop recommendations for a tuition policy that would clarify the responsibilities of taxpayers and students in paying for the costs of the University System. Based on several months of Study Committee analysis and deliberation, a recommendation was adopted that:

- calls for students and taxpayers to share equitable proportions of University System costs.
- encourages students to become cost-conscious consumers of higher education.
- responds to students' needs for predictable fee increases.

The Study Committee recommends that:

> Student tuition and matriculation fee income for the University System of Georgia should account for twenty-five percent (25%) of total General Operations revenue in the Resident Instruction budget, exclusive of amounts for Community Education and Public Service and their proportionate share of support costs. Fees should be increased fifteen percent (15%) annually until the twenty-five percent (25%) target is achieved.

Responsibility for implementing this policy rests in the Regents, who must establish the actual tuition and fee rates, and in the Governor and General Assembly through the appropriations process.

Budget Lapse. Each State agency is required to revert any unexpended general funds at the close of the fiscal year to the State's general treasury. This requirement is known as budget lapse. The Committee believes that the lapse requirement creates a disincentive for efficient financial management. Under this arrangement, almost any year-end purchase, regardless of how low its priority might be, is a preferred alternative to lapsing funds. Without the lapse requirement, we believe a more orderly plan can be developed for spending year-end balances on higher priority needs.

The Study Committee concluded that the University System should be allowed an opportunity to demonstrate that exemption from the lapse requirement would lead to more efficient management. In particular, we recommend that each institution be allowed to carry forward its unexpended balance for one year, provided that expenditures are restricted to specified non-recurring items, such as equipment, library materials and other capital outlay. We encourage the Board of Regents, the Office of Planning and Budget, the Legislative Budget Office, and the State Auditor to work together to implement this improved management practice.

Indirect Cost Recovery. Sponsored research and other sponsored programs usually come with separately identifiable revenues for institutional support through an overhead or indirect cost recovery provision. Since the funding level of sponsored programs is difficult to predict, our formula recommendations generally do not take the support requirements for these activities into account. Instead, we recommend that the colleges and universities be allowed to retain up to eighty-five percent (85%) of their indirect cost recoveries to compensate for the increased workload rather than being required to reduce the State's commitment to programs funded through the formula. This recommendation should be phased in over several years.

Cost Savings Opportunities. In fulfilling its charge to determine whether Georgia's public colleges and universities are adequately funded, the Study Committee also felt a responsibility to

evaluate how effectively the University System currently uses its resources. Two issues of particular concern were the potential for program duplication in high-cost fields of study and whether the State was operating more colleges than it could afford. Our concern over the number of institutions was of two types:

- unduly small institutions
- duplication of institutions in a geographic area.

The Study Committee concluded that it had neither the resources nor the time to develop comprehensive recommendations on these topics. But it did remain greatly concerned that unduly small institutional size, institutional duplication, and program duplication were serious problems hampering quality improvement and efficient management. Therefore, the Study Committee recommends that the University System undertake a comprehensive evaluation of its institutions to determine if opportunities for consolidation, cost savings and quality improvement exist. In particular, we recommend that institutions already below the Regents' recommended minimum size be monitored closely during the next three years.

Declining Enrollment. Part of the original charge to the Committee was to determine whether the current funding formula would impair quality in the University System as an unintended consequence of enrollment decline. In our review of this topic, we considered enrollment projections over the next decade, alternatives to enrollment-driven formulas, and the financial incentives that arise from the current formula and its alternatives.

The overall enrollment projection for the University System is for relative stability over the remainder of this decade. This projection led us to the conclusion that drastic change in the funding system was not necessary. Although some individual institutions may experience serious drops in enrollment, we determined that the system-wide request formula was not the appropriate vehicle for addressing this problem.

Adequacy of Funding for the University System. Another assignment was to determine if the University System receives an adequate amount of resources to operate quality programs. While additional funding alone is no guarantee of quality improvement, evidence suggests that funding is an important factor. We found that the University System generally ranks in the upper quartile in appropriations per student, both regionally and nationally.

We believe this funding level will allow the University System to develop and maintain high quality programs. We believe that the challenge no longer will be to catch up with other state systems, but to maintain Georgia's position among the leaders. We recommend that the State adopt as a specific target maintaining its ranking in appropriations per student among the upper quartile of states that are members of the Southern Regional Education Board.

College Participation Rate. Georgia ranks in the bottom ten percent of states in the number of high school graduates who go on to attend a college or university. Since one of the Committee's definitions of a quality system of higher education was meeting the State's manpower needs, we view the low college participation rate with some alarm. We recommend that existing higher education authorities undertake studies to determine what factors discourage a higher participation rate in college by Georgia citizens and to establish goals for improved performance.

Funding System Recommendations

Our recommendations go beyond developing a mathematical formula to support the funding request of the University System. We have analyzed and made proposals for an overall funding system of (1) mathematical formula components, (2) provisions for responding to funding needs outside the formula, and (3) a series of operating procedures.

Since the funding system should facilitate accountability, the proposed formula components correspond to nationally accepted expenditure accounting categories. The formula has major categories for:

- instruction and research
- public service
- academic support
- student services and institutional support
- operation and maintenance of plant.

Even though the formula components are designed to facilitate accountability, we do not recommend that these categories be used for financial control at the State level. During a fiscal year, changed conditions after the appropriation is requested and granted can alter the formula relationships. However, the ability to match expendi-

ture reports to formula categories should lead to periodic revision of the formula factors when operating results for one or more years suggest that the formula relationships no longer hold.

Instruction and Research. We recommend that the formula for instruction be based on three instructional levels and three broad program areas, for a total of nine different funding categories. We further recommend that these nine categories be supplemented with two other categories to accommodate special programs for remedial training for students who enter college with deficient skills and for training medical doctors, dentists and veterinarians.

We further recommend retaining the current relationships between funding for research and graduate instruction whereby an equal amount of support is provided for research as for graduate instruction. We recommend that community education be funded on the basis of the production of continuing education units. However, we do recommend stricter eligibility standards for continuing education programs to receive State funding.

Current funding procedures are based on a projected number of students, creating an incentive for the University System to be overly optimistic and for budget review authorities to be overly pessimistic about the ability of colleges and universities to attract students. Since the enrollment outlook for the next decade is relatively stable, we recommend that this source of contention be eliminated by basing funding requests on the previous year's actual production of quarter credit hours and continuing education units. This recommendation has the added advantage of enabling institutional managers to estimate future budget levels with greater confidence and to develop more meaningful financial plans.

Public Service. Since each institution in the University System has a service mission, we recommend a basic amount of funding for each institution. A relatively small dollar amount could support a public service director and office expenses. This officer would serve as a liaison between the academic community and the local community and would help identify State-sponsored academic resources available to address local needs.

As colleges and universities face demands for larger scale provision of public service, the State should provide special program-based funding for separately organized bureaus and institutes. After reviewing the programs of several existing institutes, we recommend criteria that should be met before additional funding is appropriated.

Academic Support. We recommend that base funding for academic support programs be computed as a percentage of instruction, research, and public service costs in a manner similar to that used currently for library programs. Data for the 1981 fiscal year suggests that an amount equal to 17.7 percent of instruction, research, and service costs will be needed to sustain academic support programs at their current levels.

Student Services and Institutional Support. Most predictable change in workload for support programs comes from a change in the size of the institution. Workload demands from external requirements or sponsored research are not sufficiently predictable to be incorporated in a formula. Therefore, we recommend that funding for the combined student services and institutional support program areas be calculated as a percentage of the cost of instruction, research, and public service. At the current scale of operations, these programs require 23.1 percent of the funding base.

Operation and Maintenace of Plant. For regular day-to-day operation of the plant, we recommend continuing the dollars per square foot funding approach. Gross square footage is a reasonably accurate and readily measurable factor in the cost of plant operations and maintenance.

After examination of the current non-formula plant component for major repairs, we recommend an additional formula provision. The current approach has failed to recognize either inflation or increased need. We recommend that major repairs and rehabilitation of buildings be funded at three-fourths of one percent (¾ of 1%) of current replacement value. We further recommend that the Regents document their need for this funding by presenting, as part of their budget request, a general multi-year plan that outlines the types of repair and rehabilitation work envisioned.

Many colleges and universities face energy conservation opportunities, such as retrofitting buildings or replacing inefficient heating and cooling equipment. If implemented, reduced consumption could pay back the capital expenditure in a relatively short period of time. We recommend that the Regents work with State budgeting authorities to develop special non-formula energy conservation programs that will lead to more efficient use of the State taxpayer's dollar.

Finally, the Committee recommends that redundant or outmoded space be eliminated where program reductions or declining enrollment make this feasible. We recommend a financial incentive for the University System to identify and decommission such space.

Quality Improvement Program. No formula-generated funds are specifically identified for quality improvement. Instead, we believe that a quality improvement fund, equal to one percent (1%) of the formula base, should be an additional budget item. This special funding should be appropriated after a specific quality improvement plan is developed by the Regents that identifies the planned use of funds, e.g., distinguished chairs, professional development, etc.

Conclusion

Georgians have developed a University System for which they are rightfully proud. Our Study Committee has sought to refine the funding approach that has allowed the University System to grow and flourish. We believe our recommendations will create greater incentives for efficient management and improved quality.

The only funding increases that we recommend are:

- to develop a quality improvement program.
- to encourage more externally sponsored research.
- to protect the State's capital investment in buildings.

These recommendations for increased funding will require only limited additional tax revenues since another of our recommendations calls for students to resume paying their historic share of educational costs.

We believe implementation of our entire package of recommendations will lead to a stronger University System that will be better able to serve the needs of Georgia over the coming decade.

I
STUDY PURPOSES

For the past 20 years, the major determinant of the level of State funding for the University System of Georgia has been a funding formula. Through a series of mathematical computations, a projection of student enrollments has been translated into an estimate of the number of faculty required, and eventually into the number of dollars needed to run the University System. For the 1983 fiscal year, these formula calculations total nearly a half-billion dollars. Approximately $400,000,000 of this amount is from tax funds, representing over ten percent of the overall State general revenue budget. Clearly the validity of the formula is a matter of great concern to the University System and the taxpayers of Georgia.

The formula has its origin in the recommendations of the Governor's Commission to Improve Education, i.e., the Sanders' commission, in 1963. At that time, Georgians were concernd about the quality of all levels of education in the State and the prospect of economic development. Through the work of the Governor's Commission, major advances in Georgia's educational system were proposed and most have been implemented.

After approximately ten years of reliance on the formula developed for the Sanders' commission, several deficiencies were identified. In 1972 the University System created an internal committee to develop recommendations for formula revision. The only major changes in the formula they proposed were for continuing education, plant operations, and major repairs. With the exception of the proposal for a more systematic provision for major repairs, these proposed formula changes were implemented in the appropriation for the 1974 fiscal year and generally have been followed for a decade.

When the formula was initially developed, a major concern was the projected doubling of enrollments arising from the post-war baby boom. As a result, the formula tended to rely heavily on the quantity of activity taking place in the University System. Now, twenty years later, the University System has tripled in size and has strengthened its programs. The current formula has enabled the University System to successfully weather the rapid growth in numbers.

During the coming decade, the challenge will be different. The University System probably will experience overall enrollment stability, with only minor increases or decreases from year to year. Georgia now needs a funding approach that will permit the University System to consolidate its recent progress and to focus more on qualitative improvement. Some fear that the current average-cost based, quantity-driven formula may erode the quality improvements that have been realized over the past two decades.

Because of their joint concern for a quality University System and the prospect of leveling enrollment, Governor George Busbee, members of the General Assembly, and members of the Board of Regents of the University System of Georgia decided to work together to develop a new funding strategy for the University System over the coming decade. Upon request of the Board of Regents, Governor Busbee recommended, and the General Assembly appropriated, special funds to conduct a study of higher education finance in Georgia. These three sponsoring groups also worked together to appoint a 16-member committee comprised of lay citizens, legislators, and educational leaders to study the problem and to develop recommendations for a revised funding process.

Given the history of its creation, the Study Committee on Public Higher Education Finance frequently has been referred to as the "formula revision committee." But, in fact, its purview was much broader. Working from an original charge to the Committee by Governor Busbee, the General Assembly and the Board of Regents, the Study Committee determined that its purpose was:

> to make recommendations concerning all aspects of University System funding: who

should pay, how much funding is needed, how to calculate funding requirements, and how to create financial incentives to build and maintain a quality University System.

Analysis of Relevant Trends

In preparing its recommendations for a funding system for Georgia higher education, the Study Committee examined a number of factors that influence the need for funding for colleges and universities. These include demographic (and especially enrollment) trends, economic trends, broad educational trends, and the particular situation of the University System of Georgia. The recommendations contained elsewhere in this report are designed to sustain and further build the University System during a period that should prove to be very different from most of the past twenty years.

Demographic Trends. Georgia's population of young adults and enrollment in its University System grew rapidly for over a decade, but the enrollment growth rate has slowed in the past several years except for a recession-induced spurt in 1981. Figure 1 traces this history and offers some summary projections for the next five years. Instead of enrollments increasing at a rate of nearly ten percent per year as they did immediately after adoption of the formula, the University System is likely to face stable or slightly declining enrollments.

Despite the overall appearance of stability, University System aggregate figures may mask significant enrollment shifts. Even though total enrollment may remain constant, some institutions are likely to continue to grow while others suffer serious losses. Within individual institutions, enrollments in some programs of study will be increasing while others are dropping. Thus, while the System as a whole appears relatively stable, individual institutions and programs will face serious stress.

Although enrollment growth will not be as rapid as in previous periods, the University System actually faces a bright future in comparison to higher education systems in other states. Figure 2 shows how the number of college-aged residents in various states, the region, and the nation is expected to grow or decline in the coming years. Such national comparisons are important for at least two reasons:

- to recognize that Georgia is running counter to the national trend in potential demand for higher education
- to realize that Georgia faces a major opportunity to increase its qualitative standing since higher education systems in other states will be dismissing faculty and closing programs.

These comparisons, when coupled with probable increases in the college participation rate (discussed later), suggest that the University System faces major opportunities for further development.

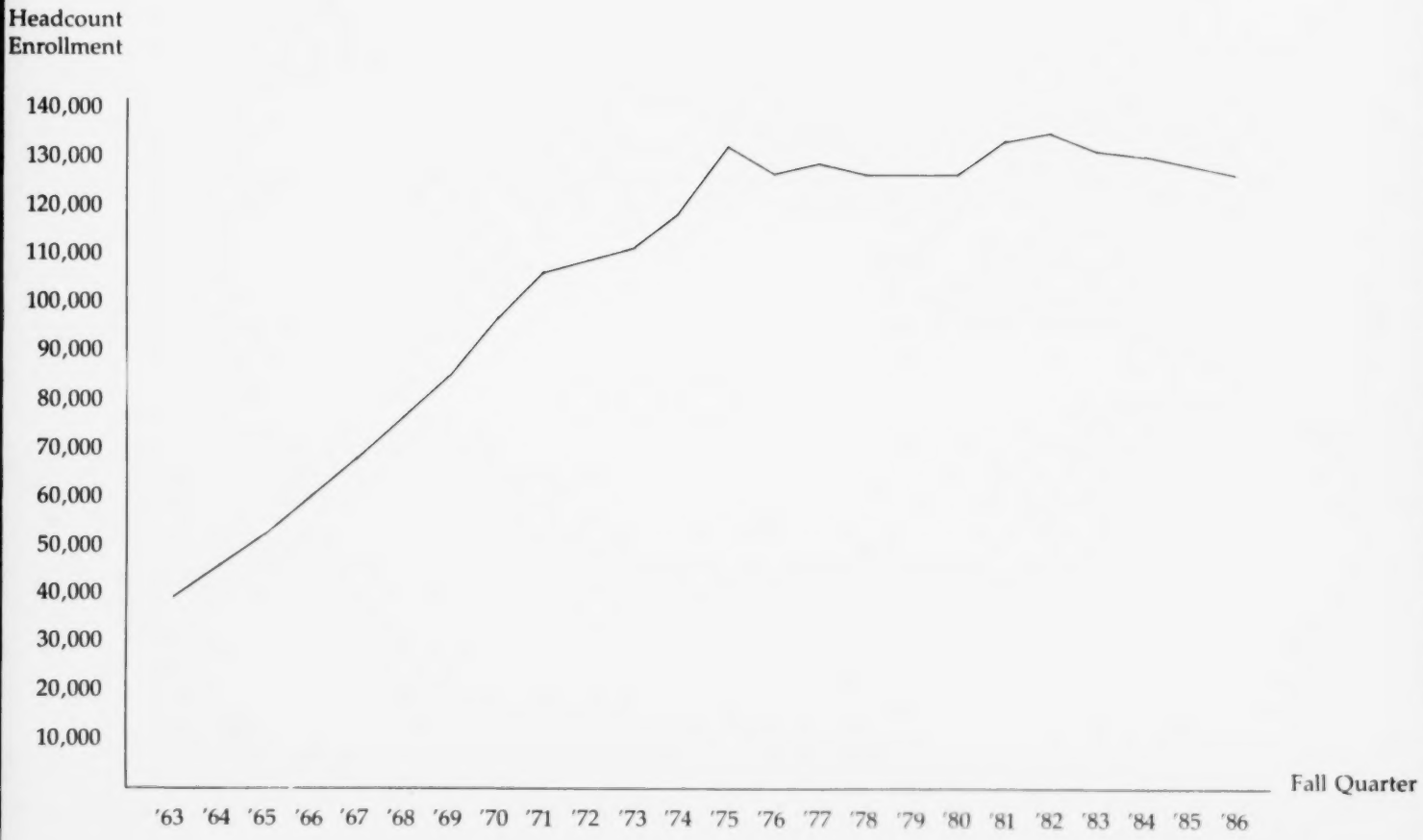
Economic Trends. State government finances in Georgia remain relatively strong. Georgia has a moderately elastic tax structure, so the expected revitalization of the national economy should bring above average revenue increases into the State treasury. Continuation of the sun-belt phenomenon is another positive factor in the State's economic future.

Even with Georgia's strong economic outlook, the growth in available State revenues is unlikely to keep pace with the growth in support demanded by State agencies. Although many details remain to be resolved concerning President Reagan's "new federalism" programs, it is likely that funding responsibility for many social programs will be shifted from the federal to state governments. Existing State-funded programs will face major competition in their claim for additional appropriations. If the University System of Georgia is to receive funding growth beyond inflationary adjustments, it will need to confirm that its formula funding system is a valid estimate of need.

Private sector economic trends are also likely to influence the University System in the coming decade. The State is experiencing economic expansion and is recruiting high technology industry. If Georgia's economy continues to grow with the types of employers that are now being sought, the demands for college-trained manpower will increase. High technology industry, in particular, will demand a high quality university system with major research capabilities.

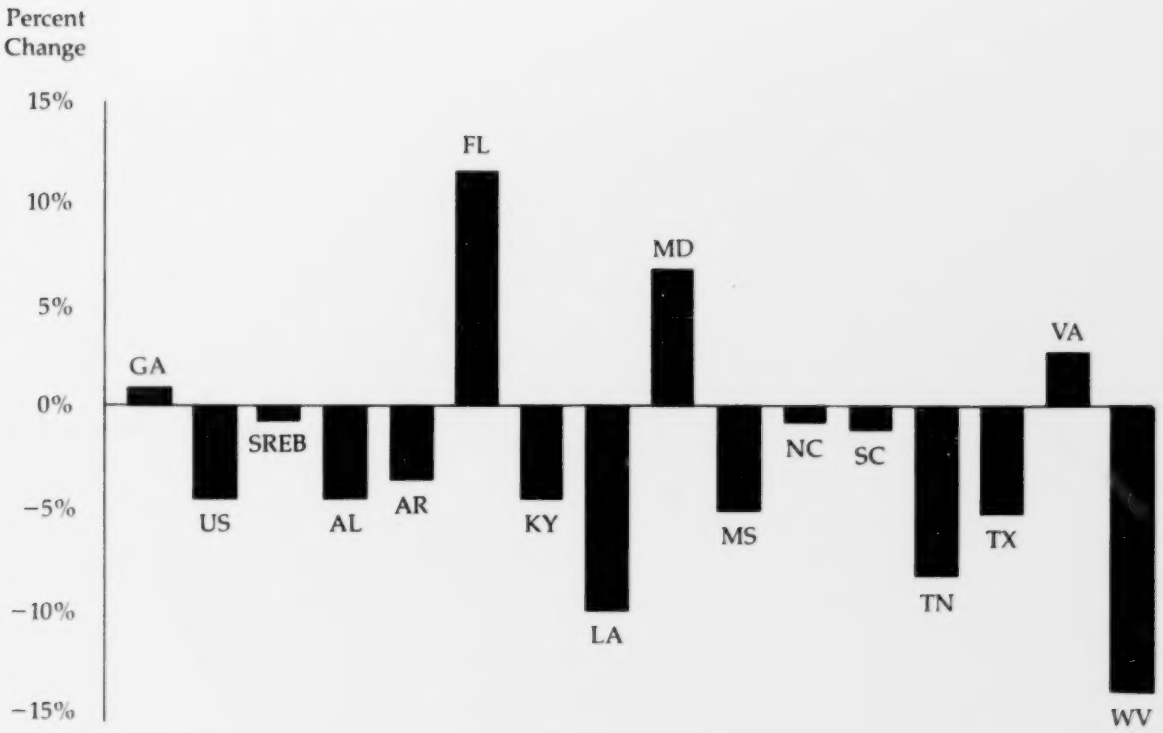
Educational Trends. Due to overall changes in the State's demography and economy, the citizens of Georgia will need access to both new and different higher education programs. Program development will need to occur at new degree levels, in new disciplines and possibly at new locations. This will present a formidable challenge to the University System in a period of increasing com-

FIGURE 1
ENROLLMENT HISTORY AND PROJECTIONS
UNIVERSITY SYSTEM OF GEORGIA



Source: Office of the Vice Chancellor for Research and Planning, University System of Georgia

FIGURE 2
PROJECTED CHANGE IN COLLEGE-AGE POPULATION
RESIDENTS AGED 15-34 YEARS
SOUTHERN STATES
1980-1990



Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 704, "Projections of the Population of the United States: 1977 to 2050" (1977); and Series P-25, No. 796, "Illustrative Projections of State Populations by Age, Race, and Sex: 1975 to 2000" (1979); *1980 Census of Population*, PC80-S1-1, "Age, Sex, Race, and Spanish Origin of the Population by Regions, Divisions, and States: 1980" (1981) (Washington, D.C.: U.S. Government Printing Office).

petition for State funds, especially if the level of resources depends solely on an enrollment-driven formula in a time of overall stability in enrollments.

Part of the need for new resources for new or different educational programs may be met through curtailment or even closure of existing programs. The University System has recently updated its academic program inventory of offerings across the State and is now undertaking a major needs assessment to determine whether each program continues to serve an important need of the State. These analytic activities are likely to be repeated with increasing frequency over the next several years.

The type of student enrolling in the University System is also likely to change over the coming decade. The past decade has seen increased rep-

resentation of female, minority and part-time students. Female enrollment may be reaching a plateau, but minority and part-time enrollments are expected to continue to grow. We also anticipate that a better qualified student body may be enrolling in the University System as a result of increased concern for quality improvement in Georgia's elementary-secondary schools. The University System will need to be alert to program shifts that result from changes in the clientele that it serves.

University System Trends. An important educational trend in the University System, in particular, is that many of the institutions are reaching an age of maturity. Nine of Georgia's thirty-three colleges were built during the past twenty years. Also, the faculties and facilities at older institutions greatly expanded during this time. The capital expansion program of the University System will need to shift to a capital maintenance program during the decade ahead. Similarly, the colleges will need to identify new ways to keep their faculties abreast of current developments as the number of new employees diminishes.

After many years of effort, Georgia's institutions are beginning to achieve national recognition for their quality. Studies have shown that quality reputations frequently lag actual quality improvements by five to ten years. It appears that the efforts of the Sanders' commission of two decades ago are finally being rewarded. We anticipate that the strengthening reputation of Georgia's higher education system will enable the State to retain its brightest young adults and to attract talent and industry from elsewhere in the nation.

Impact of Trends on Funding System

Despite early concerns that enrollment shortfalls may require major revisions in the funding system, we now believe that an enrollment-driven formula, with only minor modifications, remains a valid concept for funding the University System. Our recommendations tend to "fine tune" a funding system that has already proven itself. However, we believe that our recommendations will provide greater financial stability and significantly greater incentives for quality improvement and efficient management than the current approach. In short, our proposals are more evolutionary than revolutionary.

At a time when economic pressures on the State treasury are mounting, it is important that the concept advanced by the Sanders' commission two decades ago be reasserted:

> The Governor's Commission to Improve Education has approached education as a long-term investment, not as a one-time purchase. Impulse buying is not appropriate in education because more than dollars are required: education also takes time. States which are reaping an educational harvest today in the form of industrial expansion and social and cultural progress are the states which made the necessary educational investment a number of years ago and which continue to invest in order to secure desirable returns in the future.

We believe much of Georgia's recent educational progress is a direct result of the vision of the State's leaders in 1963. We further believe that a strong system of higher education remains an important tool in attracting industry to locate in the State and provide job opportunities needed by Georgians.

A number of educational trends require attention in the funding system. For instance, funding will be needed to start up new programs and incentives should be put in place to discontinue unneeded programs. The funding system should be sensitive to new types of workloads and new demands that will be placed on the institutions by differing types of students, whether these demands are for more opportunity for part-time study or less remedial study. Most importantly, we believe that Georgia faces a major opportunity for a strengthened University System as its own progress is now being recognized at the same time as other state systems are facing serious financial problems. We believe minor additional investments will reap major returns.

II
GUIDING PRINCIPLES

To carry out its stated purpose, the Study Committee adopted three guiding principles:

- the quality of the University System of Georgia should continue to be improved.
- the University System should be managed efficiently.
- the overall funding system should provide various financial incentives for quality improvement and efficient management.

Each of these principles is reviewed below.

Quality Improvement

The Study Committee carried out its work with the assumption that Georgia wants and needs a university system of the highest quality. This assumption grew out of the formal charge to the Study Committee by Governor George Busbee and the personal convictions of members of the Committee. An analysis of growth in appropriations to the University System over the past twenty years demonstrates that Georgians have been willing to pay to build a stronger University System. The results of our analyses show that Georgia has now assumed a leadership role in higher education among southern states and is quickly becoming a major force on the national scene.

We find the desire for a high quality university system to be consistent with other State goals. Strong colleges and universities are one of the more important factors in the State's efforts to maintain its standing as a cultural and economic leader of the South. For the State to be successful in attracting the types of high technology industry that it seeks, a large pool of highly trained manpower and strong research facilities will be required.

This renewed quest for a university system of the highest quality is not intended as an indictment of current programs in the University System of Georgia. We have seen evidence that the University System has made significant strides in achieving national reputations for its individual institutions. Instead, our aim is to ensure that the recent advances are not lost and, in fact, provide the foundation for further development.

In addressing quality improvement for an enterprise as diverse as the University System, we believe that a wide variety of quality improvement strategies should be explored. In Committee discussions, we have come to realize that quality has a number of different, legitimate meanings. A quality system of higher education:

- provides reasonable access to all citizens with the ability to benefit from advanced learning.
- allows individuals an opportunity to realize their personal and career goals.
- produces graduates with career skills and an increased ability to participate effectively in a free society.
- enables the State to achieve its economic and social goals.
- provides a challenging work place for creative minds.
- is highly regarded by its peers.

Given the broad diversity of institutional types within the University System and the numerous quality goals that Georgia citizens espouse, no single approach to quality improvement should be attempted.

For the graduate teaching universities, we see a need for continued emphasis on developing high quality research programs. Adequate research funding is necessary to attract and retain faculty and graduate students of the highest quality. We believe that prestigious research universities provide benefits not only to those who are enrolled at these institutions, but also contribute greatly to a climate that encourages general public support for an overall quality system of higher education. Several of our recommendations on funding and operating procedures are designed to enhance Georgia's four graduate universities. Because of the comparatively high cost of maintaining quality university programs, we encourage the Re-

gents to exercise restraint in expanding the number of universities.

Excellent teaching of undergraduate and graduate students is the hallmark of quality at senior colleges. These institutions have their greatest opportunity for quality improvement through maintaining a curriculum that responds to the career needs of their students and local employers. We believe a quality senior college should receive adequate funding to allow its faculty to remain abreast of the latest developments in their professional fields through programs that allow limited research, retraining, and work experience.

As currently constituted, junior colleges in the University System of Georgia are designed to enable geographic access to higher education, to offer career-oriented programs that require two years or less of training, and to provide special opportunities for those students who are not academically qualified for admission to graduate research universities. With this mission, a junior college should provide quality instruction to enable its students to transfer successfully to other units in the University System or to obtain employment. Special resources may be needed by junior colleges for remedial programs to address deficiencies that some students bring to their initial collegiate experience.

We believe that each type of institution has a legitimate claim to participate in quality improvement efforts of the University System. Producing graduates with employable skills and developing a reputation as a leader in research are equally valid quality improvement goals. Nonetheless, we remain mindful that the State of Georgia is not likely to be able to afford to undertake all of these quality improvement efforts at once. The Committee recommends that the University System develop a detailed plan that identifies and sets priorities for a quality improvement funding program. An important ingredient of the proposed quality improvement program will be the willingness of the University System to underwrite a portion of its own quality improvement efforts through reallocation from areas of less priority.

Efficient Management

If the Regents are to lead efforts aimed at improving the quality of the University System with limited additional resources, they will need increased flexibility to manage more efficiently. University System officials should be allowed to spend their dollars where they will have the greatest potential for improved quality, regardless of artificial constraints related to institutional type, formula component or fiscal year. Our recommendations address areas where the Regents' flexibility needs to be protected or increased in order to manage more efficiently.

In addition to the Committee's recommendations for the Regents to become more active in efforts to improve management efficiency, we also believe that the marketplace can provide important indicators of progress. Various recommendations of the Committee, such as those concerning tuition and fee charges and program cost differentials, rely on signals from the marketplace to regulate planning and management efforts.

Financial Incentives

The Committee's recommendations go beyond a mere plea for higher quality programs and more efficient management. We have attempted to design a funding system that provides a set of financial incentives for quality and efficiency. The principal deficiency of the current funding system is that the only way the University System can receive more dollars is to emphasize quantity. More students, more continuing education units, and more gross square feet generate more dollars. We have attempted to devise a formula and funding system that also will reward attempts to increase quality and increase efficiency. Through creation of new funding categories, many of which will be in non-formula areas, we hope to focus more attention on quality and efficiency.

In the remainder of this report, we present a series of recommendations that concern planning, organizing, and financing the University System of Georgia. We believe our recommendations support a variety of quality improvement goals and will lead to more efficient operations for the citizens and taxpayers of Georgia.

III
GENERAL FINDINGS AND RECOMMENDATIONS

In addition to being charged with developing a new formula funding approach for the University System of Georgia, the Study Committee was asked to develop recommendations concerning a number of other financial issues. At the Committee's initial meeting, representatives from the Office of the Governor, the General Assembly, and the Board of Regents expanded on the basic Committee charge. Additional topics identified at that time were tuition policy, retention of contract and grand indirect cost reimbursements, and budget lapse. Through the process of a year's discussion and analysis, the Committee identified several other general topics on which it felt recommendations were needed. Each of these general recommendations is presented in this section.

Tuition and Fee Policy

The Committee received testimony that a number of years ago there was a general understanding that tuition and fee revenue should amount to 25 percent of the Resident Instruction budget of the University System. Since this policy was never formally adopted, there was a tendency for the Regents not to raise fees as rapidly as State appropriations grew. Thus, fees dropped from 25 percent to approximately 19 percent of total revenue. Figure 3 traces tuition as a source of revenue for Resident Instruction over the past decade.

Additionally, whenever fees were increased, other problems occurred since fee increases were usually determined after the close of the legislative sessions. These late announcements of fee increases disrupted students' financial planning, which was based on an assumpton of lower fee levels. This process also strained relations between the Regents and the General Assembly since the latter group felt that the budget had already been set with lower revenue estimates.

The Committee compared required tuition and fee levels in Georgia with those in other SREB states. These analyses (see Table 1) indicated that Georgia's fees are near or above the median of charges at competing institutions. In response to these analyses, the Study Committee adopted the following recommendation:

> Student tuition and matriculation fee income for the University System of Georgia should account for twenty-five percent (25%) of total General Operations revenue in the Resident Instruction budget, exclusive of amounts for Community Education and Public Service and their proportionate share of support costs. Fees should be increased fifteen percent (15%) annually until the twenty-five percent (25%) target is achieved.

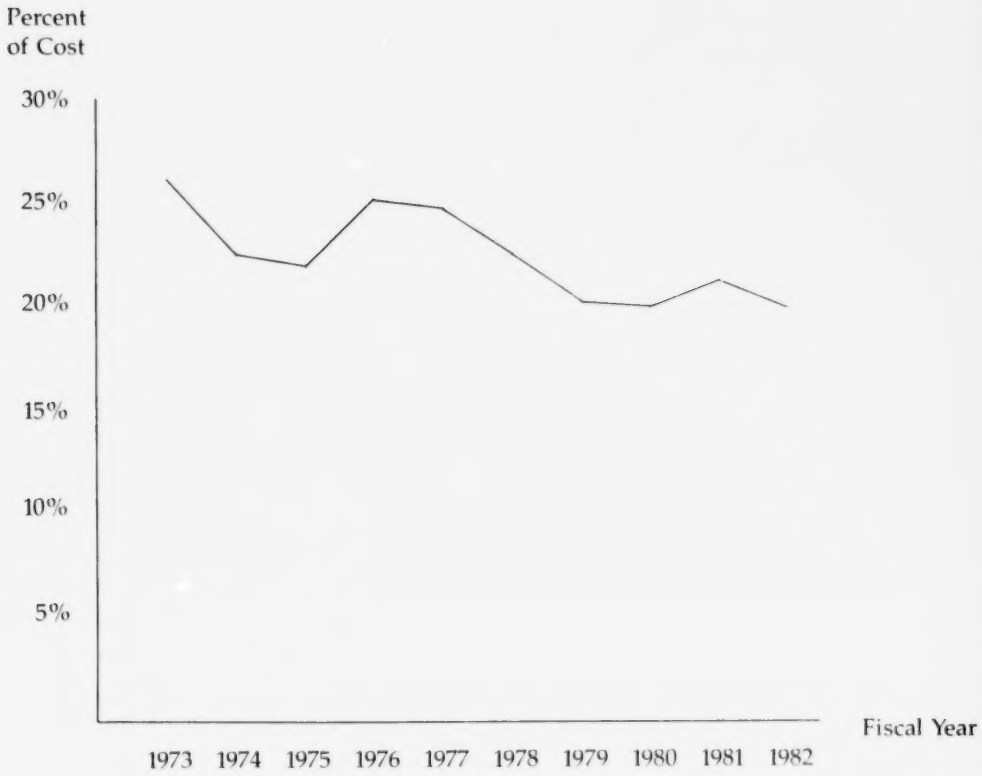
Based on several months of Study Committee analysis and deliberation, this resolution was adopted to accomplish the following goals:

- to respond to the General Assembly's desire for students and State taxpayers to share equitable proportions of University System costs
- to encourage students to become cost-conscious consumers of higher education services
- to respond to students' needs for predictable fee increases.

In implementing the proposed tuition policy, the Study Committee recommends that the Board of Regents:

- set non-resident tuition surcharge rates at no less than twice the applicable matriculation fee rate, i.e., citizens of other states should pay a combined matriculation fee and non-resident tuition that equals at least three times the rate paid by Georgia residents.
- establish matriculation fee rates for a limited number of categories that relate to major variances in per-student costs. At a minimum, these categories should continue to recognize three types of institutions and several professional schools; further considera-

FIGURE 3
TUITION AS A PERCENT OF COST
UNIVERSITY SYSTEM OF GEORGIA
RESIDENT INSTRUCTION BUDGET



Source: University System of Georgia Financial Records

TABLE 1
COMPARISON OF CHARGES FOR TUITION AND REQUIRED FEES
SOUTHERN STATES
1981-82

STATE	UNIVERSITIES		SENIOR COLLEGES		JUNIOR COLLEGES	
	Rate	Percent Above/Below Median	Rate	Percent Above/Below Median	Rate	Percent Above/Below Median
Alabama	$ 992	+23%	$ 764	+3%	$375	−3%
Arkansas	720	−11	765	+3	426	+10
Florida	805	0	795	+7	455	+18
GEORGIA	879	+9	702	−5	568	+47
Kentucky	812	0	674	−9	390	+1
Louisiana	667	−17	599	−19	350	−10
Maryland	1,073	+33	1,056	+42	642	+66
Mississippi	1,030	+27	800	+8	378	−2
North Carolina	682	−16	658	−11	140	−64
South Carolina	1,170	+45	950	+28	435	+12
Tennessee	741	−8	720	−3	390	+1
Texas	452	−44	372	−50	183	−53
Virginia	1,121	+39	820	+11	384	−1
West Virginia	628	−22	495	−33	380	−2
SREB Median	808		742		387	

Source: SREB-State Agency Data Exchange, 1982, table 9.

tion could be given to greater differentiation among graduate-level institutions.

- adjust fees annually to reflect price-level and quality increases in the University System budget.

The Study Committee acknowledges that its resolution cannot be fully implemented in the immediate future due to the magnitude of needed adjustments. The Study Committee recommends that student fees be increased fifteen percent per year in each category, including annual price-level and quality increases, until equalization across categories and the twenty-five percent target are achieved.

The Committee also considered other fees charged by the University System such as the admissions fee. We learned that current fee rates may not be sufficient since the cost of mailing catalogs and other materials has risen sharply. The Committee recommends that these fees be adjusted periodically to reflect actual costs. The Committee also recommends that funding rates in the formula be adjusted to accommodate these increased costs and revenues.

Budget Lapse

A common state budgeting practice in Georgia and elsewhere requires that each State agency revert any unexpended general funds at the close of the fiscal year to the state's general treasury. An estimate of the amount of funds to be reverted is added to estimated tax collections in developing the revenue projection for the subsequent fiscal year's appropriation. This requirement to revert funds is known as budget lapse.

Georgia has a provision in its State Constitution that requires budget lapse. What is unclear, however, is whether student fee income is subject to this requirement since fees are not "authorized by revenue measures enacted by the General Assembly." Relevant Constitutional language is shown in Table 2.

For a number of years, operating practice in Georgia exempted the University System from budget lapse, presumably on the grounds that student fee income was not subject to the lapse provision and comprised the unexpended balance. With a change in State budget office personnel about ten years ago, however, the lapse requirement was extended to the University System. As one of the financially related issues, the Committee was asked to develop its own recommendation on budget lapse.

Committee analysis and discussion focused on how the budget lapse policy affected quality and

TABLE 2
SELECTED PROVISIONS
CONSTITUTION OF GEORGIA OF 1976

2-1605 (Art. III, Sec. X) Paragraph V. General Appropriations Act

> (c) All appropriated funds, except for the mandatory appropriations required by this Constitution, remaining unexpended and not contractually obligated at the expiration of such General Appropriations Act, shall lapse.

2-4703 (Art. VII, Sec. II) Paragraph III. Revenue to be paid into general fund

> All money collected from taxes, fees and assessments for State purposes, as authorized by revenue measures enacted by the General Assembly, shall be paid into the General Fund of the State Treasury and shall be appropriated therefrom, as required by this Constitution, for the purposes set out in this Section and for these purposes only.

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management efficiency of the individual colleges and universities. We learned that prior to imposition of the lapse requirement, these funds had been a major source of revenue for purchasing equipment at the end of the fiscal year. We were told that many components of the University System now face serious needs for upgraded scientific equipment.

We also heard suggestions that the current lapse requirement creates a disincentive for good financial management. Under this arrangement, almost any year-end purchase, regardless of how low its priority might be, is preferred to lapsing funds. University System personnel suggested that without the lapse requirement, a more orderly plan could be developed for spending year-end balances on higher priority needs.

The only major disadvantage that the Committee identified in letting the University System retain unexpended balances was that these funds might be used to create greater spending requirements in the future. For instance, if one-time savings in the first fiscal year were used to hire additional personnel in the second fiscal year, additional State funds would be required in the third fiscal year to retain the same personnel since the first year's savings would be exhausted. Our recommendation is designed to overcome this disadvantage.

After consideration of all of these factors, the Study Committee concluded that the University System should be allowed an opportunity to demonstrate that exemption from the lapse requirement would lead to more efficient management. In particular, the Committee recommends that each institution be allowed to carry forward its unexpended balance for one year, provided that expenditures are restricted to specified nonrecurring items, such as equipment, library materials, and other capital outlay. The Committee recommends that the Board of Regents, the Office of Planning and Budget, the Legislative Budget Office, and the State Auditor work together to implement this improved management practice.

Indirect Cost Recovery

Institutions of the University System conduct sponsored research, service, instruction, and other projects that are funded primarily by federal and private sources. Funding for these sponsored projects, which is restricted to the resolution of specific problems or the search for knowledge, has an effect of enriching ongoing classroom teaching.

Charges made to sponsored project accounts include both direct and indirect costs. Direct costs include salaries, wages, related staff benefits, travel, laboratory supplies and expense, other operating expenses, and equipment directly associated with the particular project. Indirect costs are those that benefit more than one project; they are not identifiable with a specific project or activity. Examples of indirect costs include library resources, utilities, plant maintenance, academic administration, and general administrative overhead.

Current State budgetary practice treats direct and indirect costs differently. Direct costs are separately budgeted as additional revenue to do additional work. Indirect cost revenues, on the other hand, are used to offset State appropriations for administrative and general support and plant operations. The Committee was asked to determine whether indirect costs recoveries were being budgeted appropriately.

Since the funding level of sponsored research and other sponsored programs is difficult to predict, our formula recommendations generally do not take the support requirements for these activities into account. Instead, we believe that revenue through the indirect cost recovery provisions should fund the increased workload. The Com-

mittee recommends that the colleges and universities be allowed to retain seventy percent of their indirect cost recoveries to compensate for the increased workload (preliminary analysis indicates that the remaining thirty percent of overhead revenue is to reimburse for expenditures that are covered by the formula, e.g., plant operations). To lessen the immediate requirement for additional appropriations, this recommendation should be phased-in over four years. After the seventy percent target is achieved, the Committee further recommends that the overhead retention rate be increased to eighty-five percent in order to provide an incentive to attract sponsored research funding.

Cost Savings Opportunities

In fulfilling its charge to determine whether Georgia's public colleges and universities are adequately funded, the Study Committee also felt a responsibility to evaluate how effectively the University System currently uses its resources. Two issues of particular concern to some Committee members were the potential for program duplication in high cost fields of study and whether the State was operating more colleges than it could afford.

The Study Committee's concern over the number of institutions is of two types:

- unduly small institutions
- duplication of institutions in a single geographic area.

The Committee reviewed the history of the creation and development of the institutions in question to develop a better understanding of why they exist.

Minimum Institutional Size. A generally accepted economic principle is that when organizations operate below a certain scale of activity, they have a higher unit cost of production. In a higher education setting, this translates into a higher cost per student at smaller institutions. The Committee was interested in determining whether the same students could be served at larger institutions either at a smaller unit cost or with a higher quality program for the same cost.

We identified a number of different minimum institutional size standards, including standards that were adopted by the Georgia Board of Regents in September 1980. The Regents' policy identifies minimum and optimum enrollment sizes for three types of institutions within the University System. These student population targets, expressed in terms of equivalent full-time students in the fall quarter, are:

Institutional Type	Minimum EFT	Optimum EFT
Universities	7,500	12,000
Senior Colleges	2,000	6,000
Junior Colleges	500	2,000

The Committee also found standards dating back to 1971 that had been recommended by the Carnegie Commission. Their standards called for an even higher minimum enrollment size. Applying the more conservative Georgia standards to current enrollment patterns, three of fifteen junior colleges and four of fourteen senior colleges did not meet the minimum enrollment standard in the fall quarter of 1981.

Failure to achieve minimum institutional size alone may not be a sufficient reason to close or consolidate institutions. The State also is considering other public policies that speak to basic geographic access to postsecondary education for its citizens. However, we recommend that inefficient scale of operations be used as the major criterion when State policymakers consider how to provide these services.

Duplication of Institutions. The Committee also was concerned that several of the smaller cities in the State are the home of more than one University System campus. In these instances, one of the institutions is a traditionally black college and the other is a traditionally white institution. Although we recognize that institutional duplication is a social and political issue as well as an economic concern, the Committee believes that the quality of educational offerings in these communities might be greater if the resources of these institutions could be combined.

The Study Committee concluded that it had neither the resources nor the time to develop a comprehensive recommendation on either the minimum size or duplication topics. But it did remain greatly concerned that unduly small institutional size and institutional duplication were serious problems hampering quality improvement and efficient management. Therefore, the Study Committee recommends that the University System undertake a comprehensive evaluation of its institutions to determine if opportunities for consolidation, cost savings and quality improvement exist. In particular, we recommend that institutions already below the Regents' rec-

ommended minimum size be monitored closely during the next three years. Should any of these colleges experience further enrollment declines rather than moving toward the Regents' minimum size criteria, we believe that they should be merged into other institutions or converted to other appropriate public or private uses.

Program Duplication. The Committee also heard suggestions that the University System not only should guard itself against too many institutions, but also should avoid program duplication, particularly in high cost fields of study. Although the Committee did not determine the current extent of this problem, changing economic and demographic conditions indicate a strong potential for unneeded programs in the coming years. As part of their ongoing program review process, we recommend that the Regents identify programs to be eliminated. We recommend that the Governor and General Assembly, upon request of the Regents, appropriate special funding beyond formula amounts to cover the costs of program discontinuance.

Declining Enrollment

Part of the original charge to the Study Committee was to determine whether the current funding formula would impair quality in the University System as an unintended consequence of enrollment decline. In our review of this topic, we considered enrollment projections over the next decade, alternatives to enrollment-driven formulas, and the financial incentives that arise from the current formula and its alternatives.

The overall enrollment projection for the University System, as reported in chapter I, is for slight fluctuations over the remainder of this decade. This projection led us to the conclusion that drastic changes in the funding system were not necessary. Although some individual institutions may experience serious drops in enrollment, the Committee determined that the Systemwide budget request formula was not the appropriate vehicle for addressing this potential problem.

Beyond not wanting to introduce institutional-level detail in the formula, the Study Committee further concluded that too much protection in the formula from enrollment decline might create disincentives for efficient management. That is, we believe that enrollment reductions should cause a re-examination of the continued need for individual programs and institutions. This belief is further reinforced by our concerns, discussed above, about unduly small institutions and program duplication.

Despite not recommending major formula accommodations to declining enrollment, the Study Committee's recommendations do provide protection from unintended consequences of serving fewer students. First, the Committee recommends elsewhere a change in the method of counting enrollments for funding calculations. By relying on the previous year's actual enrollment rather than the next year's projected enrollment, the formula funding system will provide a two-year planning period to respond to enrollment decline for those programs that do rely on enrollment counts for funding.

Second, a number of formula components that we recommend do not rely on credit enrollment for funding. These components, when taken together, account for twenty percent of the current budget. For instance, funding for public service, continuing education, and plant operations and maintenance will not vary with enrollment according to our proposals.

Finally, our recommended provisions for non-formula items in the funding system would permit still further protection, if necessary, from major enrollment decline in programs or institutions. We envision special appropriations to retrain existing faculty and to provide for phasing-out discontinued programs. The Study Committee believes these three aspects of our recommendations responsibly address the problems that might otherwise result from enrollment shortfall.

Adequacy of Funding for the University System

One question, which grew out of the Study Committee's concern for quality improvement and a more rational formula funding process, was whether the current formula has generated an adequate amount of resources to operate quality programs. While additional funding alone is no guarantee of quality improvement, evidence suggests that funding is an important factor in developing and maintaining quality programs.

Committee analyses included a series of measures related to adequacy of funding. They ranged from indices of the taxpayers' ability to pay to estimates of dollars spent per student. We found

that Georgia has both a lower tax capacity and a lower tax effort than other states. The combination of these two factors results in significantly lower than average tax revenues per capita when compared nationally, but just above average when compared regionally. Approximately the same proportion of the total state budget is allocated to public institutions of higher education in Georgia as nationally. The net result is a smaller share per capita in appropriations to higher education than the national or regional average. Table 3 summarizes these analyses.

In addition to looking at the availability of funding for higher education, we examined student demand. Figure 4 shows that Georgia has significantly lower participation in postsecondary education among its younger residents than do neighboring states. The fact that Georgia now appears to rank last among the southern states in the percentage of its young adults participating in postsecondary education is a source of special concern to the Study Committee and is addressed later in this report.

The appropriations per student calculation combines resource availability and student demand into a single measure. Unfortunately, comparing appropriations per student among states is an inexact science. States have different organizational arrangements to provide higher education, different ways to count students, and different accounting practices. For these reasons, the Committee elected not to place too much credence on any single analysis of financial support per student. Instead, we examined data from several sources, which used different computational techniques, to determine whether there is a consistent pattern in how Georgia compares with other states. We obtained interstate expenditure comparisons for the 1979 fiscal year from the National Center for Higher Education Management Systems (NCHEMS) and preliminary appropriations data for the 1982 fiscal year from the National Institute of Education (NIE) and the Southern Regional Education Board (SREB). In an attempt to overcome comparability problems in the other studies, the Committee staff did its own analysis for the 1981 fiscal year, which was the last year for which complete data were available. Table 4 compares these data for southern states and, when available, a national ranking is listed.

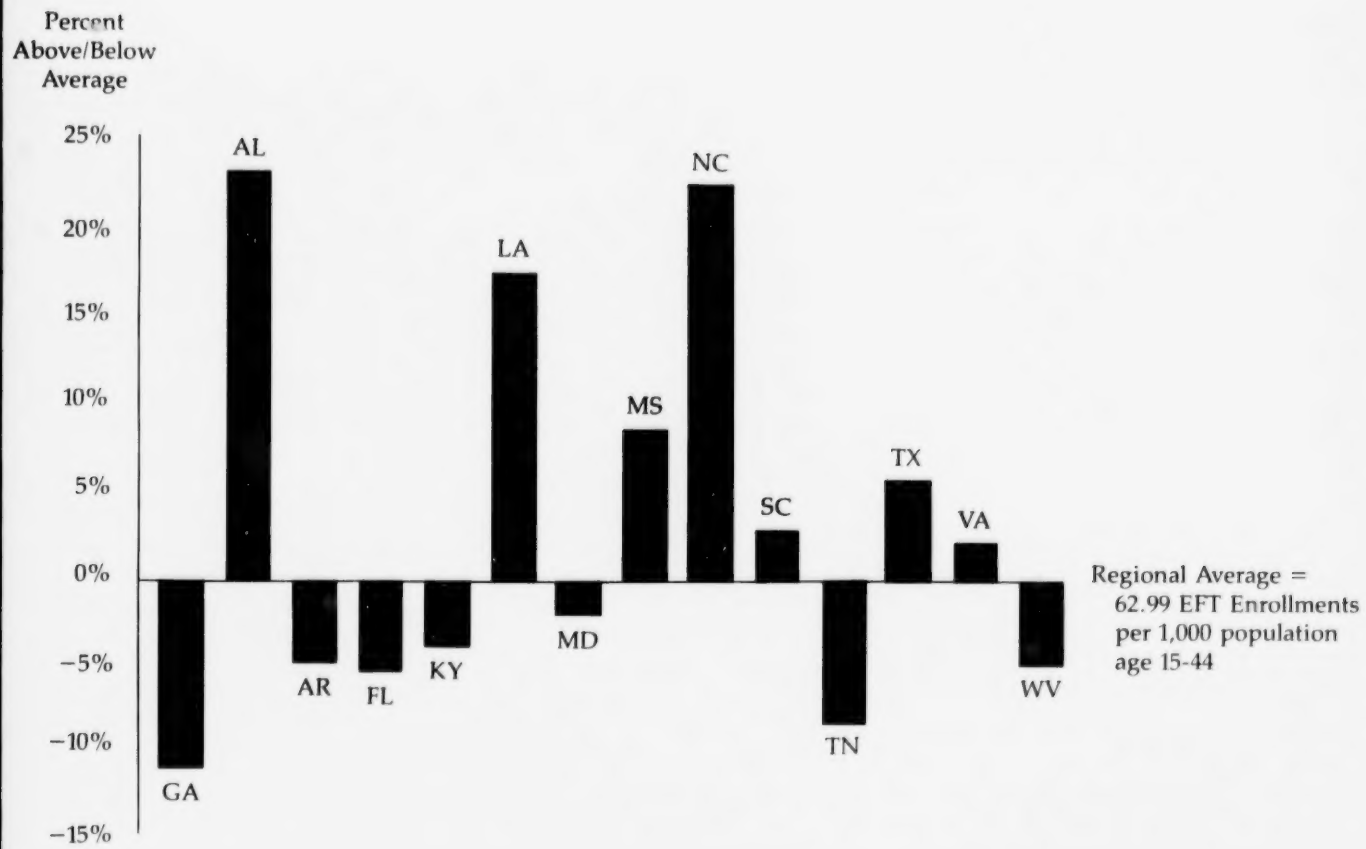
We found that the University System ranks above average in appropriations per student,

TABLE 3
ABILITY TO SUPPORT HIGHER EDUCATION
SOUTHERN STATES
FY 1979

State	Tax Capacity Per Capita	Tax Effort	Tax Revenues Per Capita	Proportion Allocated To Public Institutions Of Higher Education	Per Capita Allocation To Higher Education
Alabama	$605	79%	$480	18.3%	$88
Arkansas	615	79	484	13.4	65
Florida	814	73	594	10.8	64
GEORGIA	666	89	595	10.7	64
Kentucky	681	89	554	14.8	82
Louisiana	815	76	617	9.9	61
Maryland	785	106	830	8.8	73
Mississippi	542	96	520	16.5	86
North Carolina	651	88	573	15.5	89
South Carolina	605	87	528	17.4	92
Tennessee	645	83	538	11.3	61
Texas	884	68	604	14.6	88
Virginia	707	88	626	12.8	80
West Virginia	724	78	568	11.8	67
SREB Average	$696	84	580	13.1	$76
National Average	$782	100	782	10.0	$78

Source: *State Rankings Summary Report: Results of the NCHEMS-NIE Study of Higher Education Financing in the Fifty States, FY 79.* Boulder, Colorado: NCHEMS, 1982 (preliminary draft).

FIGURE 4
POSTSECONDARY EDUCATION PARTICIPATION RATES
SOUTHERN STATES
FALL 1980



Source: Staff telephone survey of state higher education and vocational education agencies, HEGIS reports, and U.S. Census reports.

TABLE 4
COMPARISON OF STATE SUPPORT RANKINGS
SOUTHERN STATES
DOLLARS PER EFT STUDENT

	(1) NCHEMS: FY 79			(2) NIE: FY 82			(3) SREB: FY 82		(4) Georgia Study Committee: FY 81	
State	Amount	National Rank	Regional Rank	Amount	National Rank	Regional Rank	Amount	Regional Rank	Amount	Regional Rank
Alabama	$2,807	17	5	$3,205	37	13	$2,208	14	$3,090	10
Arkansas	2,818	16	4	3,441	27	10	2,549	9	3,375	3
Florida	2,490	34	10	3,547	25	9	2,740	4	3,261	5
GEORGIA	2,806	18	6	4,492	6	1	3,153	1	3,202	7
Kentucky	3,405	6	1	3,975	14	6	2,599	8	3,055	11
Louisiana	2,228	44	14	4,017	13	5	2,711	5	2,891	13
Maryland	2,450	37	12	3,383	29	11	2,444	11	3,120	9
Mississippi	2,759	20	7	3,842	17	7	2,252	13	3,196	8
North Carolina	2,942	12	3	4,156	9	3	2,917	3	3,622	2
South Carolina	3,264	7	2	4,112	10	4	2,599	7	3,640	1
Tennessee	2,332	39	13	3,059	41	14	2,401	12	2,829	14
Texas	2,660	22	8	4,354	7	2	2,990	2	3,280	4
Virginia	2,618	25	9	3,237	35	12	2,467	10	2,897	12
West Virginia	2,477	36	11	3,742	19	8	2,629	6	3,229	6
Average	$2,718			$3,754			$2,618		$3,192	

Sources:
(1) State and local appropriations per EFT student. From *State Rankings Summary Report: Results of the NCHEMS-NIE Study of Higher Education Financing in the Fifty States, FY 79*. Boulder, Colorado: NCHEMS, 1982 (preliminary draft).
(2) State and local tax appropriations per fall EFT student (includes amount for all activities and support elements of higher education, e.g., hospitals, experiment stations, etc.). From *How States Compare in Financial Support of Higher Education 1981-82*. Washington, D.C.: National Institute of Education, 1982.
(3) State appropriations per fall EFT student (excludes amounts for non-instructional community service activities and cooperative extension, experiment stations, medical, dental, optometry, veterinary medicine and training hospitals). From SREB-State Agency Data Exchange, 1982, Table 8.
(4) State and local tax appropriations per fall EFT student (includes amounts for all activities and support elements of higher education and postsecondary vocational education). From *Appropriations of State Tax Funds for Operating Expenses of Higher Education, 1980-81*. Washington, D.C.: National Association of State Universities and Land-Grant Colleges, 1980, and staff telephone survey of state higher education and vocational education agencies.

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both with regional and with national comparison groups. Further analysis suggests that Georgia's ranking has been improving in recent years, both regionally and nationally. The University System's advancement in national rankings is due in part to recent reductions in educational spending in economically depressed states. Using SREB data, Figure 5 shows Georgia's steady progress over the past seven years in improving its position among southern states.

We believe Georgia is close to achieving a funding level for its University System that will allow it to develop and maintain high quality programs. We believe that the challenge in the decade ahead no longer will be to catch up with other state systems, but to maintain Georgia's position among the leaders. If funding levels and quality have a positive relationship, we believe that maintenance of the current funding level will express itself in greatly improved quality in the University System in the coming decade. The Committee recommends that the State adopt as a specific target the maintenance of its ranking in appropriations per student among the upper quartile of states that are members of the Southern Regional Education board.

Student Access to Higher Education

As mentioned in our analyses of funding adequacy, Georgia ranks poorly in the percentage of its young adults who attend a college or university. Various studies suggest that Georgia ranks nationally in the bottom ten percent of states on this measure. We admit to being confused with this finding since other analyses indicate that

FIGURE 5
TREND IN STATE APPROPRIATIONS PER STUDENT COMPARED TO REGIONAL AVERAGE

Source: SREB-State Agency Data Exchange, 1975-76 through 1981-82.

Georgia has an adequate (or even more than adequate) number of postsecondary institutions. Perhaps a partial answer lies in the quality of the secondary school system in the State. Although elementary-secondary education was not included in the Committee's charge, we do believe that a quality system of higher education depends heavily on a quality system of elementary-secondary education. The Committee recommends that a group similar to this Study Committee give attention to funding and quality issues for Georgia's public schools.

One of the missions of the junior college is to provide geographic access to higher education. Even though Georgia has a number of junior colleges, these colleges serve a relatively small proportion of the total student population. One factor that may influence attendance at junior colleges, as well as overall access to the University System, is the high level of tuition and fees at Georgia's junior colleges in comparison with similar schools in other states and with area vocational-technical centers in Georgia. The Committee recommends that State leaders develop a comprehensive plan that more clearly distinguishes between the missions of junior colleges and vocational centers and resolves the inequities in student charges at the two types of schools.

Since one of the Committee's definitions of a quality system of higher education suggested that the system should meet the State's manpower needs, we view the low college participation rate with some alarm. The Committee recommends that existing higher education authorities, such as the Board of Regents or the Governor's Committee on Postsecondary Education, undertake studies to determine what factors discourage a higher participation rate in college by Georgia citizens and to establish goals and programs for improved performance.

IV
DESIRED CHARACTERISTICS OF FORMULA FUNDING SYSTEM

Although the Study Committee on Public Higher Education Finance was widely known as the formula revision committee, our efforts went much beyond developing recommendations on the mathematical formula that is used to support the funding request of the University System. Instead, the Committee has analyzed and made recommendations for an overall funding system. In this context, a funding system is a combination of mathematical formula components, various provisions for responding to funding needs outside the mathematical formula, and a series of operating procedures that describe how the formula and non-formula components should be administered. Examples of these operating procedures are those that specify how enrollment is to be counted and when; how the formula variables that specify funding rates should be adjusted to accommodate inflationary trends; and even how to delineate the particular mix of revenues that are required to fund the appropriation.

Inherent in the funding system concept is the interaction of the three components and how they create various types of incentives and disincentives for the individual colleges and universities, the University System, and State funding authorities to take certain actions. For this reason, we believe that it will be important for all parties concerned to consider our recommendations in their entirety. Otherwise, our proposed system might be thrown out of balance.

Intended Application of Funding System

The funding system that we propose is intended primarily to help document the need for financial support for the general operations of the University System of Georgia in its Resident Instruction budget. Within the Resident Instruction budget, we also have examined the adequacy of funding and have recommended a revenue mix that will support quality improvement efforts. To some extent, our recommendations go beyond the Resident Instruction budget entity of the University System and include other agencies under the Regents' control. This is especially true in our recommendations for non-formula components and in the several operating procedures and practices.

We found that a major strength of the University System is its comprehensive structure that includes diverse levels of colleges and universities. We believe this major strength should be preserved. There are differences between institutional missions and roles within the University System and there are programs with unique resource requirements that are peculiar to particular institutions. Because of these differences, the Committee recommends a formula based on University System aggregates. The Committee has attempted to develop a formula that will provide aggregate resources to fund all levels and all disciplines in the University System.

In order for the formula to be simple, easily understood, and flexible, the Committee did not attempt to develop a recommendation for an allocation formula to distribute funds among the individual institutions. Such a complex and detailed formula would be unwieldy and inflexible as an appropriation mechanism. However, the methods used to determine the aggregate needs of the System should reflect known cost differences among levels and broad programs of instruction.

We acknowledge the constitutional provisions of the State of Georgia that provide that the appropriation to the Regents is to be in lump sum. The benefits to be derived from a central governing authority in terms of coordination and overall policy direction are lost if individual schools are guaranteed funding in absence of other planning and policy implications. We believe that the Regents typically will have more information than is provided by a formula about the specific needs of an individual institution in a specific year. For instance, additional resources may be required to phase in or phase out a program due to a separate policy decision that cannot be recognized in the formula.

The Committee's recommendations for a funding system do not include recommendations for line-item control according to the individual formula components. As stated in chapter II, one of our guiding principles was to create a funding system that would enable efficient management of the University System. We believe artificial line-item controls will detract from the ability of the Regents, their staff, and institutional administrators to manage the colleges and universities efficiently. On the other hand, consistent variance in material amounts from formula estimated expenditures should require explanation. Whenever a multi-year spending pattern emerges that is inconsistent with the formula relationships, the formula should be evaluated by the Regents to determine if formula adjustments should be requested.

Funding System Evaluation Criteria

In developing the recommendations for a funding system that are described in the next chapter, a series of six criteria were employed to evaluate alternative proposals. Each is discussed below.

1. *A funding system should facilitate accountability.* To the extent possible at the systemwide level of aggregation, the overall funding system should permit state budget authorities to determine whether the appropriation was expended on the functional areas identified in the budget request. For this reason, the various components of the funding system should correspond with ongoing record-keeping systems normally used to demonstrate accountability. In particular, the Committee recommends the use of the functional expenditure categories, i.e., instruction, academic support, etc., used by the federal government, the American Institute of Certified Public Accountants, and the National Association of College and University Business Officers for financial reporting.

2. *The workload variables used in the formula should be readily measurable.* The formula that we propose provides financial resources in proportion to various workload units, such as quarter credit hours, continuing education units, and gross square feet to be maintained. Since these factors play such an important role in the overall funding system, they should be amenable to precise definition and easy, inexpensive measurement.

3. *The funding system should rely on formula components for recurring needs and on non-formula components for non-recurring and special needs.* The Study Committee did not attempt to reduce every dollar of need to a mathematical equation. Instead, we recognized that an enterprise as complex and dynamic as the University System frequently will have needs that are special or unanticipated. Just because these needs are not reduced to a formula should not imply that these needs have any less priority for funding than do the formula components.

4. *The broad categories in the funding formula should generally reflect aggregate expenditure patterns of the University System.* An important criterion for evaluating the formula is how accurately it reflects reality. We believe this standard should be applied at the aggregate, University System level.

5. *Formula variables should respond to changing conditions.* A funding level can become inadequate for a program's needs for at least three reasons: a change in the amount of work to be done, a change in the prices of the necessary inputs, or changed assumptions about the necessary mix of resources to produce an equivalent output. To the extent possible, a funding formula should be able to respond separately to changes in any of these three factors.

6. *The funding system should provide an easy means to communicate needs of the University System to funding authorities.* Most legislators and other individuals responsible for determining the appropriation of tax funds to the University System do not have extensive backgrounds in higher education finance at the institutional level. They also do not have sufficient staff resources to consider financial needs in small units of analysis. Thus, the formula should be presented at relatively aggregate levels and in straightforward terms. In this instance, a formula whose validity is self evident may be preferred over one that is more sophisticated, yet only slightly more accurate.

In actual application, these six criteria often can be found to contradict one another. For instance, the "easy means to communicate" criterion precludes developing a formula that can "respond to changing conditions" in every formula component. In developing its recommendations for a funding system, the Study Committee attempted to achieve an appropriate balance among these several criteria.

V
FUNDING SYSTEM RECOMMENDATIONS

Structure of Funding Guidelines

Consistent with our earlier recommendation that the funding system should facilitate accountability by the University System, the proposed formula components correspond with nationally accepted expenditure accounting categories. The formula has major categories for:

- instruction and research
- public service
- academic support
- student services and institutional support
- operation and maintenance of plant.

Table 5 shows the proportion of expenditures by category and by institutional type for the 1982 fiscal year.

Even though the formula components are designed to facilitate accountability, we recommend that these categories not be used for financial control at the State level. During a fiscal year, changed conditions after the appropriation is requested and granted can alter the formula relationships. However, an ability to match expenditure reports to formula categories should lead to periodic revision of the formula factors when operating results for one or more years suggest that the formula relationships no longer hold.

The next five sections describe each major formula component following a similar format. As appropriate, each section contains:

- a description of the programs to be supported
- a statement of relevant findings and general recommendations
- formula recommendations
- other recommendations for operating procedures and non-formula support.

The closing section of this chapter addresses how these recommendations should be implemented in a funding formula for the 1984 fiscal year, and how the formula should be updated for use in subsequent fiscal years.

Instruction and Research

Description of Programs. Even though instruction and research are highly interrelated, college accounting manuals provide separate definitions. The instruction category:

> should include expenditures for all activities that are part of an institution's conventional academic subdivisions, including remedial instruction. This category may be composed of four subcategories:
>
> General Academic Instruction
> Vocational and Technical Instruction
> Community Education
> Preparatory and Adult Basic Education
>
> (Source: Business Procedures Manual, Volume 1 Revised, University System of Georgia).

The research category:

> includes all expenditures for activities specifically organized to produce research outcomes . . . (and) . . . separately budgeted by an organizational unit within the institution. Subject to these conditions it includes expenditures for individual or project research as well as those of institutes and research centers . . . Expenditures for departmental research that are separately budgeted specifically for research are included in this category. (Source: Business Procedures Manual, Volume 1 Revised, University System of Georgia).

The combination of these two expenditure reporting categories is proposed as a major formula component.

Findings and General Recommendations. The current formula funds instruction at three levels of instruction, implicitly recognizing that graduate level instruction is more costly to provide than lower level and upper level course offerings. Through a series of analyses, we have determined that instructional costs vary not only by course level, but also according to the program of study. This has been demonstrated through an analysis of formulas used in other states and through a

TABLE 5
PERCENTAGE DISTRIBUTION OF EXPENDITURES
BY CATEGORY AND INSTITUTION TYPE
FY 1982

	Institutional Type			
Category	**Universities**	**Senior Colleges**	**Junior Colleges**	**System**
Instruction	51.1%	51.2%	45.8%	50.6%
Research	4.3	.1	.0	2.6
Public Service	2.9	.2	.2	1.9
Academic Support	11.5	8.0	8.7	10.2
Student Services	3.3	5.5	6.3	4.2
Institutional Support	13.9	18.4	20.5	15.9
Physical Plant	13.0	16.6	18.5	14.6
Total	100.0%	100.0%	100.0%	100.0%

cursory cost analysis of instructional programs in the University System. More importantly, we have determined that costs should vary by program and level for reasons related to:

- being competitive in the academic salary marketplace.
- maintaining scientific laboratories.
- establishing the different class sizes needed to offer quality programs in different fields of study and at different levels.

The Committee has further noted that the mix of the University System's instructional load changes from year to year and significant program shifts can be noted over longer periods of time. In recent years there has been a pronounced shift in student demand to career-oriented programs, such as business administration, engineering, and health professions, and away from the more traditional liberal arts. The combination of differing costs among programs and levels and shifting demands among programs has demonstrated a weakness in the current formula for instruction and research. Specifically, the University System has been unable to fund adequately students who are now enrolling in higher cost programs from the savings gained through curtailing lower cost programs. Our formula recommendation addresses this problem.

Testimony presented to the Study Committee indicates that research is a necessary mission of institutions of higher education, especially the graduate universities. We learned that graduate instruction and research are so interrelated that, in certain instances, the professor and the advanced graduate student find it difficult to distinguish between these two activities. Not surprisingly, this difficulty carries over to the accounting records of several of the institutions. We further noted that many studies that attempt to rank the quality of universities rely heavily on research funding and research productivity. These findings have led us to recommend that instruction and research continue to be treated as a combined formula component.

Formula Recommendations. The Committee recommends that the formula for instruction be built around three instructional levels or types and three broad program areas, for a total of nine basic funding categories. We further recommend that these nine categories be supplemented to accommodate two special programs offered by the University System:

- for remedial training of students who enter the University System with deficient skills.
- for training future doctors of dentistry, medicine, and veterinary medicine.

Table 6 shows the suggested structure of the instruction component of the formula.

The Committee further recommends continuing the current relationship between funding for research and graduate instruction whereby an equal amount of support is provided for research as for graduate instruction. This relatively simple approach has served Georgia and its University System well over the past two decades. Ample research funding will continue to be needed to maintain quality programs at the State's four universities.

TABLE 6
PROPOSED BUDGET FORMAT FOR INSTRUCTION PROGRAM AND LEVEL FUNDING BASIS

A. ACADEMIC POSITIONS REQUIRED

Program Area*	Quarter Credit Hours			÷ Instructional Productivity			= Academic Positions			
	Lower	Upper	Graduate	Lower	Upper	Graduate	Lower	Upper	Graduate	Total
Group 1	1,130,727	290,024	100,257	1655	1273	836	683	228	120	1,031
Group 2	787,907	670,545	388,028	1542	1215	761	511	552	510	1,573
Group 3	827,368	481,209	163,947	1175	795	424	704	605	387	1,696
Group 4	276,749	—	—	1160	—	—	239	—	—	239
Group 5	—	—	87,693	—	—	369	—	—	238	238
Total	3,022,751	1,441,778	739,925				2,137	1,385	1,255	4,777

B. ACADEMIC SALARIES

Program Area	Academic Positions			× Average Salary Rate =	Academic Position Salary Amount			
	Lower	Upper	Graduate		Lower	Upper	Graduate	Total
Group 1	683	228	120	$33,599	$22,948,117	$ 7,660,572	$ 4,031,880	$ 34,640,569
Group 2	511	552	510	33,936	17,341,296	18,732,672	17,307,360	53,381,328
Group 3	704	605	387	33,623	23,670,592	20,341,915	13,012,101	57,024,608
Group 4	239	—	—	32,689	7,812,671	—	—	7,812,671
Group 5	—	—	238	46,444	—	—	11,053,672	11,053,672
Total	2,137	1,385	1,255		$71,772,676	$46,735,159	$45,405,013	$163,912,848

C. INSTRUCTIONAL SUPPORT POSITIONS AND SALARIES

Program Area	Academic Positions			÷ Position Ratio	× Salary Rate =	Instructional Support Salary Amount			
	Lower	Upper	Graduate			Lower	Upper	Graduate	Total
Group 1	683	228	120	3.7	$11,662	$ 2,157,470	$ 723,044	$ 373,184	$ 3,253,698
Group 2	511	552	510	3.4	11,745	1,761,750	1,902,690	1,761,750	5,426,190
Group 3	704	605	387	2.8	12,386	3,108,886	2,675,376	1,709,268	7,493,530
Group 4	239	—	—	3.7	13,463	875,095	—	—	875,095
Group 5	—	—	238	1.9	13,174	—	—	1,646,750	1,646,750
Total	2,137	1,385	1,255			$7,903,201	$5,301,110	$5,490,952	$18,695,263

D. INSTRUCTIONAL OPERATING EXPENSE

Program Area	Combined Salary Amount			× Expense Ratio =	Operating Expense			
	Lower	Upper	Graduate		Lower	Upper	Graduate	Total
Group 1	$25,105,587	$ 8,383,616	$ 4,405,064	6%	$1,506,335	$ 503,017	$ 264,304	$ 2,273,656
Group 2	19,103,046	20,635,362	19,069,110	13%	2,483,396	2,682,597	2,478,984	7,644,977
Group 3	26,779,478	23,017,291	14,721,369	18%	4,820,306	4,143,112	2,649,846	11,613,264
Group 4	8,687,766	—	—	9%	781,899	—	—	781,899
Group 5	—	—	12,700,422	14%	—	—	1,778,059	1,778,059
Total	$79,675,877	$52,036,269	$50,895,965		$9,591,936	$7,328,726	$7,171,193	$24,091,855

E. INSTRUCTIONAL PROGRAM COST SUMMARY

Program Area	Total Budget			
	Lower	Upper	Graduate	Total
Group 1	$26,611,922	$ 8,886,633	$ 4,669,368	$ 40,167,923
Group 2	21,586,442	23,317,959	21,548,094	66,452,495
Group 3	31,599,784	27,160,403	17,371,215	76,131,402
Group 4	9,469,665	—	—	9,469,665
Group 5	—	—	14,478,481	14,478,481
Total	$89,267,813	$59,364,995	$58,067,158	$206,699,966

*Program Area Assignments

Group 1: Law, Letters, Library Science, Psychology, Social Sciences
Group 2: Area Studies, Business, Communications, Education, Home Economics, Mathematics, Public Affairs, Interdisciplinary Studies
Group 3: Agriculture, Architecture, Biological Sciences, Computer Science, Engineering, Fine and Applied Arts, Foreign Languages, Health Professions, Physical Sciences, Technologies
Group 4: Remedial/Developmental Programs
Group 5: Medicine, Dentistry, Veterinary Medicine

Finally, the Committee recommends that community education be funded on the basis of the production of continuing education units. This particular formula structure is a continuation of the approach adopted in the 1974 formula revisions. As noted below, however, we do recommend changes in the eligibility requirements for continuing education programs to receive State funding.

Other Funding Recommendations. In addition to recommendations for a formula structure for instruction and research, the Committee has a number of recommendations concerning:

- how the formula is to be administered.
- funding for activities not covered by the formula.

Each is discussed below.

One principal factor in the determination of the funding requirement for a particular fiscal year is the number of students to be instructed. Current funding procedures are based on a projected number of students, creating an incentive for the University System to be overly optimistic and for budget review authorities to be overly pessimistic about the ability of colleges and universities to attract students. Since the enrollment outlook for the next decade is relatively stable, we recommend that this source of contention be eliminated by basing funding requests on the previous year's actual production of quarter credit hours and continuing education units. This recommendation has the added advantage of enabling institutional managers to estimate future budget levels with greater confidence and to develop more meaningful financial plans. As additional enrollment information becomes available during the budget request cycle, older data should be replaced on a quarter-by-quarter basis.

The Committee also recommends that the budgeted enrollment, along with the projected fee rates, be used in estimating tuition and fee revenue. If realized enrollment is greater or less than the previous year's actual level, the surplus or shortage in tuition collections should be reflected in the current year's budget. State tax appropriations, however, should not be affected by enrollment variations.

The Committee was disturbed to learn that remedial instruction was necessary for students who had been admitted to college. While we are encouraged that current efforts to improve the quality of Georgia's secondary school system may lead to better-prepared college students in the future, we are forced to concede that remedial work still must be offered by the University System. The Committee does recommend, however, that these efforts be concentrated in the junior colleges and senior colleges.

After prolonged discussion, the Study Committee agreed that many continuing education programs, i.e., community education programs, offered by the University System provide important opportunities to the citizens of the State. We believe that the State should share in the cost of providing postsecondary education to its citizens regardless of whether the learning opportunity is offered for credit or non-credit. The Committee recommends that the cost of community education programs be shared equally by the State and the participants. We found that some continuing education programs are not collegiate in nature, i.e., they do not require the human or physical resources of an institution of higher education. Such "hobby" or personal enrichment courses are routinely offered by others in addition to the local college. For these reasons, the Study committee recommends that State funding for continuing education be restricted to programs that meet the criteria listed in Table 7. Personal enrichment programs should be offered only when they can be financially self-supporting.

The Committee believes that research is important in creating a quality university and recommends that the level of research funding by the State be based on graduate enrollment. The Committee recommends that the University System renew its efforts to identify the costs and the benefits of its State-funded research programs. We further recommend that the University System evaluate programs operated by other state systems of higher education that are patterned after the National Science Foundation's Research Applied to National Needs (RANN) program. Through these programs, a certain portion of State-funded research is dedicated to solving problems of particular importance to the State. We believe that such programs might reassure taxpayers that State-funded research is a wise investment.

Public Service

Description of Programs. The current formula provides funding for public service activities

TABLE 7
FUNDING ELIGIBILITY CRITERIA
FOR CONTINUING EDUCATION

1. The non-credit activity is planned in response to an assessment of educational need and is oriented toward occupational, career, or professional skills and knowledge or toward the solution of community or societal problems.
2. There are written statements of objectives, rationale, and purpose for such programs prepared prior to the beginning of the activity.
3. Content is elected and organized in a sequential manner.
4. There is evidence of pre-planning.
5. The activity is of an instructional nature and is sponsored or approved by an academic or administrative unit of the institution best qualified to affect the quality of the program content and to approve the resource personnel utilized.
6. Participants are registered to provide a permanent, individual CEU record, and to provide data for institutional reporting.
7. During planning, appropriate evaluation procedures are built into the program and criteria are established for awarding individual CEUs to participants who successfully complete the program.
8. A permanent and retrievable CEU record is maintained for each participant by the institutional registrar.

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through the continuing education unit mechanism. We propose a separate component for public service since the volume of non-credit instructional activity was not found to be a good indicator of the State's need for non-instructional services. This formula component for public service is to fund:

> activities that are established primarily to provide noninstructional services to individuals and groups external to the institution. . . . Examples of such activities are: conferences, institutes, general advisory services, reference bureaus, radio and television, consulting, and similar noninstructional services to particular sectors of the community. (Source: Business Procedures Manual, Volume 1 Revised, University System of Georgia).

Findings and General Recommendations. The University System has a long tradition of providing valuable public services to the citizens of Georgia. Although public service has its roots in the land grant movement, all public institutions have public service as one of their primary missions. This mission varies according to type of institution, with junior colleges offering short-term services to members of its immediate community and major research universities offering large scale programs of applied research and technical assistance.

The universities typically have created separate organizational entities, known as institutes, bureaus or centers, to provide these public services. Due to the nature of these somewhat unique public service activities, the level of need or effort is difficult to reduce to a mathematical formula. Accordingly, the Committee recommends that public service programs be funded on a programmatic need basis.

Funding Recommendations. Since each institution in the University System has a service mission, the Committee recommends a basic level of funding at each institution. A relatively small dollar amount per institution could provide funding for a public service director and office support. The function of this office would be to serve as a liaison between the academic community and the local community and to identify State-sponsored academic resources available to address local needs.

As institutions face demands for larger scale provision of public service, the State should provide special funding for separately organized institutes. After reviewing the programs of several existing institutes, the Committee recommends

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TABLE 8
FUNDING ELIGIBILITY CRITERIA
FOR PUBLIC SERVICE INSTITUTES

1. The activity is classified as public service in the audited financial statement of the institution.
2. The activity is formally recognized by the Board of Regents as an institute or center.
3. The activity focuses on responding to the needs of the State of Georgia.
4. The activity does not produce continuing education units (CEUs) that are also used to generate State funding.
5. The activity is of material size and has a separately identifiable staff.
6. The activity is subject to external program review on a periodic basis.

that certain criteria be met before additional funding is appropriated. These criteria are listed in Table 8. We recommend that existing institutes that meet these criteria receive continuation funding at their current levels (plus price-level adjustments) until specific proposals are offered to expand or curtail the level and types of service offered. Newly created institutes that meet these criteria should be separately identified in the University System's annual budget request.

Academic Support

Description of Programs. This proposed formula component combines the library category in the old formula with several other activities that were not separately identified. For funding purposes, academic support programs are those designed:

> to provide support services for the institution's primary missions: instruction, research, and public service. It is appropriate to include expenditures for media and technology employed by the three primary programs as well as administrative support operations that function within the various academic units. It also includes the retention, preservation, and display of materials as well as the provision of services that directly assist the academic function. Academic Support includes the following subcategories:
>
> Libraries
> Museums and Galleries
> Audio/Visual Services
> Computing Support
> Ancillary Support
> Academic Administration
>
> (Source: Business Procedures Manual, Volume 1 Revised, University System of Georgia).

Findings and General Recommendations. A number of activities on a typical college campus have significant impact on the quality of the institution, but are not organized as part of the regular instruction, research, and service programs. The Study Committee recommends that academic support be a separate formula component.

With the possible exception of the museums and galleries category, all these programs are experiencing extremely rapid technological change. We received testimony that libraries are no longer only a repository for books and journals, but now also depend on computer and microform technology for the dissemination of information. Through bibliographic networks, the location of previously hard to find and rare material is almost immediate. Access to hard to find material is greatly expanded through microform technology.

The computer is also bringing major changes to the types of audiovisual services offered in support of academic programs. Interactive, computer-driven, video disk training packages are replacing movies, slides, and filmstrips. Computer technology itself has changed substantially and access to computing is available to students and faculty in all fields of study (rather than just science and engineering) and at locations away from the main computing center. In fact, the vast majority of the University System's institutions rely on a central computer center on The University of Georgia campus rather than maintaining their own mainframe.

We believe these technologies provide many exciting opportunities for improving the quality of programs in the University System. However, we believe that many of these new technologies may replace the need for existing types of services. Only with specific quality improvement proposals should the current funding levels be changed.

Formula Recommendations. The Committee recommends that funding for academic support programs be computed as a percentage of instruction, research, and public service costs in a manner similar to that currently used for library programs. Data for the 1981 fiscal year suggest that an amount equal to 17.7 percent of instruction, research, and service costs will be needed to sustain academic support programs at their current levels.

Other Funding Recommendations. Given the major technological advances underway and the important role that academic support programs play in the quality of an institution, we believe the University System should develop proposals for non-formula funding in the academic support component. Proposals that suggest quality improvement opportunities or that identify how new technologies could reduce financial requirements in current instruction, research, and academic support programs should receive serious consideration by funding authorities. Further development of programs that enable sharing of academic support resources throughout the University System should be a high priority.

Student Services and Institutional Support

Description of Programs. Current accounting standards require reporting expenditures for the former Administration and General function under two new categories. The student services category:

> should include funds expended for offices of admissions and registrar and those activities whose primary purpose is to contribute to the student's emotional and physical well-being and to his intellectual, cultural, and social development outside the context of the formal instruction program. (Source: Business Procedures Manual, Volume 1 Revised, University System of Georgia).

The institutional support category:

> includes expenditures that provide activities whose primary purpose is general operational support of the institution. These expenditures are not specifically identifiable with operations of academic or administrative departments. . . . Institutional Support should include the following subcategories, and others as needed:
>
> Executive Management
> Fiscal Operations
> General Administrative Services
> Logistical Services
> Community Relations
> Staff Benefits
> General
>
> (Source: Business Procedures Manual, Volume 1 Revised, University System of Georgia).

We recommend that these two categories continue to be combined as a single formula component.

Findings and General Recommendations. Although not as directly linked to the academic processes as other programs, student service and institutional support programs have major influence on the quality of an institution. In the words of one speaker who testified before the Committee, student service programs go beyond the concern for the academic development of the student and address the total development of the student as a person. Institutional support services are important in providing the overall direction of institutional development and in maintaining a workplace where faculty members can devote their attention to teaching and research.

Workload in the student service and institutional support budget component has increased greatly in the past decade due to litigation and implementation of mandated programs. Other increases in administrative workload can be traced to the increased level of sponsored research on university campuses. This increased workload was considered in developing our funding recommendations.

Formula Recommendations. Most of the predictable change in workload for these programs comes from a change in the size of the institution to be supported. Increased demands due to external requirements or sponsored research are not sufficiently predictable to be incorporated in a formula. Therefore, the Committee recommends that funding for the combined student services and institutional support program areas continue to be calculated as a percentage of the cost of instruction, research, and public service. At their 1981 scale of operations, those programs required approximately 23.1 percent of the funding base.

Other Funding Recommendations. The Committee makes two recommendations for non-formula funding in the student services and institutional support area. These concern:

- fringe benefits.
- externally assigned responsibilities.

Each is discussed below.

Fringe benefits should continue to be a separate formula component. This recommendation derives from the fact that rate increases for social security and other retirement programs and premium costs for insurance programs continue to vary at rates significantly different and above those recognized for the operating needs of instruction, research, and public service programs.

In recognition that agencies external to the University System can have significant influence on the level of workload that is not reflected by increased enrollments, the Committee recommends that the Regents request additional non-formula funding whenever needed. After the permanence of the increased workload and the funding requirements are established, these special items should be incorporated in the formula rate.

Operation and Maintenance of Plant

Description of Programs. The Committee rec-

ommends retaining the current plant operations and maintenance element as a separate component. This category:

> should include all expenditures of current operating funds for the operation and maintenance of physical plant, and in all cases it should represent an amount net of charges to auxiliary enterprises, hospitals, and other budgetary units. It includes all expenditures for operations established to provide services and maintenance to grounds and facilities. It does not include expenditures made from plant funds.
> (Source: Business Procedures Manual, Volume 1 Revised, University System of Georgia).

Findings and General Recommendations. The buildings and grounds of a college or university provide the physical environment for learning and research. Also, the plant represents a major financial investment of the State's taxpayers. The replacement value of the physical plant of the University System of Georgia now exceeds two billion dollars. For these reasons, adequate funding for plant operations and maintenance is important. We have approached the development of funding recommendations for plant operations and maintenance through three formula components and one non-formula component.

Formula Recommendations. For regular day-to-day operation of the plant, including custodial services, grounds maintenance, and security, the Committee recommends a continuation of the dollars per square foot funding approach. Gross square footage of Resident Instruction buildings is a reasonably accurate and readily measurable factor in determining the cost of plant operations and maintenance.

After examination of the current non-formula plant component for major repairs, we recommend an additional formula provision. The current non-formula treatment has failed to recognize either inflation or increased need as evidenced by the fact that the major repair fund (MRF) has been funded at a constant $2.25 million per year for over a decade and annual rehabilitation amounts have ranged from $80,000 to $5 million. After examining and rejecting a more elaborate simulation model for projecting replacement costs for some twenty different building components, the Committee instead recommends that a combined MRF and rehabilitation subcomponent be funded at three-fourths of one percent (¾ of 1%) of current replacement value of all University System buildings. This approach will provide increased funding to protect the State's capital investment as building replacement costs increase and as the size of the plant grows. The three-fourths of one percent (¾ of 1%) rate compares favorably to similar provisions used by major corporations. We further recommend that the Regents document their need for this funding by presenting, as part of their budget request, a general, multi-year plan that outlines the types of repair and rehabilitation projects envisioned.

Due to the rapid increases in energy costs, we make one further formula recommendation in the physical plant component. The Committee proposes a separate formula component for utilities. Even with reduced consumption, utility rate increases have occurred of such magnitudes that the incremental cost of utilities from one year to the next exceeds an institution's entire budgeted inflationary adjustment for the plant area. Through treatment as a separate component, we believe more reasonable funding levels may result and that other areas of operation will not be neglected as an unintended consequence of utility rate increases.

Other Funding Recommendations. An advantage of treating utility expense as a separate formula component is that we believe it will highlight the need to develop major programs to reduce energy consumption. We received testimony that many colleges face energy conservation opportunities, such as retrofitting buildings or replacing inefficient heating and cooling equipment. The economics of these opportunities are such that projected savings from reduced consumption could pay back the capital expenditure in a relatively short period of time. The Committee recommends that the Regents work with State budgeting authorities to develop special non-formula energy conservation programs that will lead to more efficient use of the State taxpayer's dollar.

Finally, the Committee recommends that redundant or outmoded space be eliminated where program reductions or declining enrollment make this feasible. We recommend a financial incentive for the University System to identify and decommission such space. For example, a three-year continuation of square foot payments could be offered on any space that is proposed for decom-

missioning, after it is demolished or taken out of service in some other way. Funds gained in this way might then be used for educational quality improvement projects on the same campus.

Quality Improvement

Findings and General Recommendations. The quality of a college or university is determined primarily by the quality of its instruction and research programs, but support programs also make significant contributions. As the Committee reviewed funding formula alternatives for instruction and research and the support formula components, considerable attention was given to how a new funding system could improve the quality of the University System. A number of quality improvement strategies were identified:

- creation of special chairs or other programs to recruit and retain distinguished faculty members
- creation of professional development programs to enable existing faculty members to improve or update their skills
- designation of selected programs, which have high potential for national acclaim, to receive special programmatic funding above formula amounts
- creation of short-term purchasing programs to equip classrooms and laboratories with state of the art equipment or to strengthen library collections.

The Committee believes that each of these alternatives merits further consideration by the Board of Regents in the development of a quality improvement strategy. However, the Committee does not endorse any single approach as the best for incorporation in the funding formula.

Our assessment of quality improvement programs in other states not only yielded a list of alternative strategies, but also found that most states have not attempted to reduce quality improvement funding to a formula relationship based on student demand. Instead, common practice is to establish a separate quality improvement fund above and beyond the normal formula. Neighboring states have found that a non-formula supplement, which is only several percent above base funding, is sufficient to focus significant attention on quality improvement. With the current lack of a specific quality improvement strategy for the University System, we believe that a non-formula approach is best for Georgia. The Committee does recommend, however, that instruction and research be the area of highest priority for additional funding for the University System.

Formula Recommendations. Our instruction and research formula recommendations essentially provide for continuation of the current level of financial support for the University System. Thus, none of these formula-generated funds are specifically identified for quality improvement. Instead, the committee proposes that quality improvement funding should be a separate formula component. We believe that a modest additional investment equal to one percent of the total formula amount will provide a sufficient challenge to the University System to further enhance its programs. The Committee recommends that this additional funding be based on a specific quality improvement plan developed by the Board of Regents that identifies the intended use of funds, e.g., distinguished chairs, professional development, etc. The quality improvement plan should identify short-term funding needs, e.g., programs that can be fully implemented or made self-sustaining through formula funds within several years.

Formula Implementation

The type of formula that we propose needs to be adjusted periodically in two separate ways:

- to reflect changes in workload relationships.
- to provide for price level adjustments.

Our recommendations call for several changes in the workload relationships in the current formula. The formula that we propose for implementation is shown in Table 9 expressed in 1983 funding rates. The Regents should request their 1984 appropriation in this format using more current information for enrollments, salaries, and unit funding rates.

Estimated Cost. The Committee is recommending two significant improvements in funding levels for the University System:

- to develop a quality improvement program
- to protect the State's capital investment in buildings.

Additionally, in an effort to encourage more research, we are proposing changes in the way in which support activities related to sponsored research are funded. The estimated costs of these three funding improvements total approximately $23 million. But as Table 10 shows, this cost is

TABLE 9
PROPOSED BUDGET FORMAT

I. Instruction and Research		
A. Instruction (from table 6)	$206,700,000	
B. Research (amount equal to graduate instruction)	58,067,000	
C. Community Education (306,460 CEUs × $36.28)	11,118,000	
II. Public Service		
A. Campus Coordinators	1,683,000	
B. Institutes	4,390,000	
FUNDING BASE		$281,958,000
III. Academic Support (17.7% of funding base)		49,907,000
IV. Student Services and Institutional Support		
A. General Support (23.1% of funding base)		65,132,000
B. Fringe Benefits		40,122,000
C. Retirement		34,000,000
V. Operation and Maintenance of Plant		
A. Regular Operations (20,870,685 gross square feet × $2.31)		48,211,000
B. Major Repairs/Rehabilitation Fund ($2,057,749,000 plant replacement value × ¾ of 1%)		15,433,000
C. Utilities (20,870,685 gross square feet × $1.16)		24,210,000
SUBTOTAL		$558,973,000
VI. Quality Improvement Program (1% of subtotal)		5,590,000
TOTAL		$564,563,000

TABLE 10
ESTIMATED COST OF COMMITTEE RECOMMENDATIONS

	Fiscal Year			
	1984	1985	1986	1987
Increased Funding Requirements:				
Quality Improvement Program	$ 5.6 million	$ 5.6 million	$ 5.6 million	$ 5.6 million
Major Repair/Rehabilitation Fund	13.2	13.2	13.2	13.2
Indirect Cost Recovery Policy	1.2	2.4	3.7	4.9
Total	$20.0 million	$21.2 million	$22.5 million	$23.7 million
Increased Revenue Availability:				
Tuition Policy	$ 8.0 million	$16.7 million	$25.4 million	$25.4 million
Net Cost (Savings)	$12.0 million	$ 4.5 million	($ 2.9 million)	($ 1.7 million)

Note: Estimates expressed in 1983 dollars. Assumes tuition increases of 15% annually until 25% target is met. Assumes tuition increase is applied equally to inflation adjustments and phase in of 25% target.

offset by the projected increase in tuition revenue that results from returning to the twenty-five percent of cost policy. In short, the student beneficiaries of these educational programs will pay the increased costs related to quality improvements while the taxpayers will continue to face increased costs resulting from inflation.

Since the phase-in periods of the proposed spending and revenue increases do not coincide, the initial cost burden for some of the program improvements will fall on the State. In the event that State tax revenues are insufficient to implement all of these recommendations and accommodate inflation at the same time, the Committee

recommends that the Regents advise the Governor and General Assembly of the University System's priorities.

Future Formula Modifications. The Committee believes that the formula can and should be periodically adjusted without a requirement for a special citizens' study committee. In previous sections of this chapter, we have noted how the workload relationship variables should be evaluated and adjusted periodically to reflect actual utilization of funds or to incorporate desired programmatic change.

The utility of our formula recommendations as a long-term basis for funding the University System is contingent upon the development of a data base that will permit periodic revision of the formula factors. The Committee recommends that the University System and State funding authorities document the procedures used to quantify workload. For instance, we see a need for standards for assigning quarter credit hours to the various program categories. Similarly, we see the need for greater definition in counting and reporting gross square feet to be maintained, and we anticipate the need for better documented procedures to calculate building replacement value for the proposed MRF funding formula. Finally, new procedures for counting continuing education units, based on our funding eligibility criteria, will need to be developed. The Committee recommends that the Regents take immediate steps to improve and expand their information systems in order that formula factors can be updated for 1985 and subsequent fiscal years.

VI
CLOSING OBSERVATIONS

Georgia has developed a strong University System over the past two decades. The State's growing investment in its University System has been rewarded by qualitative increases at several levels. Each of the major universities in the State is recognized as a leader, both regionally and nationally, in fulfilling its respective mission. The senior colleges serve their regions of the State with an increased range of program offerings. The junior colleges provide geographic access to college transfer and occupational programs for nearly every Georgia citizen.

Despite the temptation to overhaul the method used to fund Georgia higher education, we chose instead to refine the funding system that has enabled the University System to develop. The changes that the Study Committee does recommend are in response to our three guiding principles of quality improvement, management efficiency, and financial incentives.

The Study Committee offers several recommendations that are designed to improve the quality of the University System:

- funding, on a per-student basis, should be maintained among the upper quartile of southern states.
- special non-formula funding, one percent beyond formula-generated amounts, should be appropriated for specific quality improvement efforts.
- instructional funding should be based on known cost differences among programs to prevent an unintended curtailment of quality due to shifts in student preference among programs.
- indirect cost recoveries should be used to reimburse for additional expenses not covered by the formula and to provide seed money for further research.
- the reasons underlying the low college participation rate should be examined.

Implementation of these quality-related proposals should lead to a stronger University System.

Several recommendations developed by the Study Committee are for more efficient management practices:

- the incentive to expend all funds prior to the close of each fiscal year, known as budget lapse, should be eliminated.
- student fees should have a direct relationship to program costs.
- public service and continuing education programs should meet established criteria before being eligible to receive state funding.
- the need for small and duplicative colleges and for duplicative programs in high cost fields should be re-examined.
- the State's capital investment in academic buildings should be protected through formula support for major repairs and rehabilitation of facilities.
- excess space should be decommissioned.

Adoption of these recommendations will permit the Board of Regents to become more effective managers of the University System.

Many of the Committee's recommendations, including those just described, incorporate financial incentives for improved quality and efficient management. For instance:

- the goal of an upper quartile financial ranking will encourage high quality students and faculty to become a part of the University System.
- retention of indirect cost recoveries will replace the current penalty for attracting sponsored funding with a small reward.
- provision of special non-formula funds will focus attention on strategies to improve quality.
- removal of the lapse requirement will enable more efficient purchasing practices.
- the direct relationship between student fees and program costs will cause the students to respond as consumers to proposed program changes.
- the absence of formula provisions to protect

the University System from declining enrollment in some institutions will encourage the Regents to examine carefully the continued need for these colleges.

- special appropriations to phase-out programs or decommission buildings will provide the resources necessary to implement decisions to curtail activities.

These incentives should lead to higher quality, yet more efficient, operations.

In conclusion, the Study Committee believes its set of recommendations are for the type of University System that Georgians want, can afford, and deserve. We urge the Governor, the General Assembly, and the Board of Regents to consider and endorse our proposals.